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ON FUNCTIONAL DISEASES OF THE HEART.

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By SIR DYCE DUCKWORTH, M. D., LL. D., Honorary Physician to H. R. H. the Prince of Wales; Physician to, and Lecturer on, Medicine in St. Bartholomew's Hospital; President of the Section.

Gentlemen: The subject which I now venture to submit to you for discussion to-day, is one on which, as it appears to me, this Section may very profitably engage. It may fairly be affirmed that our knowledge at the present time respecting it is still far from complete, and if we can bring fresh light to bear on it, our time will have been usefully spent.

Cases illustrating what we commonly term functional disorder of the heart are frequently met with in practice. Sometimes they present little difficulty, either for diagnosis or successful treatment; at others, very nice discrimination is called for, and both diagnosis and treatment may exercise our highest skill. The whole subject has certainly become better defined for us since knowledge of cardiac physiology, and the due recognition of physical signs relating to the heart, have become part of the common knowledge of the profession. On this account we can hardly go back with profit to the teaching of our forefathers respecting these conditions; and I say this with all veneration for those who preceded us, since I am not one of those who consider that the dawn of true knowledge only fell upon those of us who first saw the light some forty or fifty years since. I learn every day to respect more and more the calm judgment and intuition of those who lived in an age of less fuss and feverish strife, of more calmness and reflection than is easily procurable for us of to-day.

The remarks I propose to make shall refer to conditions of cardiac disturbance and of vascular disturbance, which can fairly be held distinct from all such as are plainly associated with, if not dependent on, organic diseases of the heart or the great vessels. We apply the term "functional" here, and I maintain the use of the term as necessitated for clinical practice, *pace* the purists and the physiologists, whom, indeed, we often have to part company with to meet the claims of the bedside. We leave the physiologist at the door of his laboratory, and we are to heal our patients in our wards. The work of each is different. The physician is not commonly skilful in the laboratory; the physiologist, if he be a physician, is not necessarily the best practitioner, and I do not expect that time will effect much change in these relationships. For me, medicine is an art founded on many sciences, and a great physician is a great artist. I take it, the physiologist would refuse to be dubbed an artist. Of course, I say this with the highest respect for the latter; but it is necessary in these days to claim the rightful sphere for the bedside man, whose work is with the ever changeful problems presented by humanity in its sicknesses. Our aim as hospital teachers, is to make good practitioners; men who can treat and heal the sick. That, I say, is our whole business.

Our subject to-day relates to irregular and inordinate action of the heart and blood vessels, whether that action be unduly slow, irregular, intermittent, or unduly frequent. We are here face to face with symptoms which, though in many cases appearing practically alike, yet own varied causation; and in each case our duty is to trace out the cause. Symptoms of diseases at the bedside are thus like the products of diseases in the dead-house. A morbid change may be the result of very different causes, and the clinical history alone can sometimes supply us with the exact cause which led up to the particular morbid product. Hence, morbid anatomy often reveals but a part of the whole story of the case under examination.

I shall clear the way for this discussion by treating the subject of functional cardio-vascular and rythmical disturbance in the following order:

a. Infrequency, }
b. Intermittency, } Arrhythmia.
c. Irregularity, }
d. Inordinate frequency (tachycardia).
e. Inordinate vascular pulsation.

a. INFREQUENCY.—*Infrequent Pulse* (*Pulsus rarus*).—This condition is not often met with. Sometimes it appears as a constitutional peculiarity, not more than thirty or forty beats occurring in the minute. Such infrequency may accompany convalescence from acute diseases. Where physical signs of cardiac disease are detectible, aortic stenosis, or fatty condition of the walls may be indicated. The most marked instances within my own knowledge of the class of cases I now refer to, arose apparently as a result of the influence of malarial poison, which sometimes leaves an impress for life on the heart's rhythmical action in respect of infrequency. Jaundice is well known to cause infrequency of pulse. Increased arterial tension has this effect, but in much less degree. The nervous condition upon which this alteration of rhythm depends, is either of temporary or of permanent character. The results of injuries to the head causing infrequent pulse, may be recalled in this connection—the so-called *pulsus cephalicus*, also met with in encephalitis, meningitis, cerebral abscess and hemorrhage. Whether the condition is due to inhibitory sympathetic influence, or to intensified action of the vagi fibres, is not certainly known. In the acute cerebral disorders, infrequency may suddenly give way to extreme frequency, or to irregularity; the morbid process either being of a wandering nature, or acting at one time in a paresifying, and at another in an irritating, fashion. In the instances due to malarial influence, we must suppose that some abiding change has occurred in the cardiac centres in the medulla oblongata, whereby a complete alteration of rhythmic impulse is established. In any case of infrequency, there are no facts, so far as I know, to justify anxiety or a grave prognosis in respect of longevity.

b. INTERMITTENCY.—I take next, intermittent action of the heart, that condition of pulse known as arrhythmia. The pulse here is regular, but from time to time a beat is dropped. The next beat is more forcible. This has, as is well known, sometimes no important significance, at others it may portend grave cardiac disease. Under the influence of emotion or excitement, irregular action is apt to supervene in some persons; but this may only occur when there is from some cause a lowered standard of general health. It is not peculiar to either sex. It may be affirmed that irregularity is commonly of graver import than mere intermittence. In any case, the gravity is to be determined by careful physical examination of the heart and radial pulses. As emotion or excitement passes off, the heart's action becomes regular in most of the simple cases. Amongst the less serious causes of intermittent action, may be noted the action of excess of tea-drinking or indulgence in tobacco-smoking. Prolonged overwork, night work, curtailment of sleep, anxiety and worry, violent shock or grief, are all recognized factors in inducing intermittent cardiac action. If the sufferer is not advanced in life, and mends his bad habits, with time all such effects may pass off, a proper trophic equilibrium being attained. Habitual intermittency may, however, be compatible with a full term of life and a heart practically sound. Intermittency may pass off temporarily under the stress of an acute illness with pyrexia, and return with the reëstablishment of health.

The cause of temporary intermittency is not uncommonly irritation set up by dyspepsia. Recumbent posture may aggravate it, and the assumption of the erect position remove it. Hence, retiring to rest after a full meal may prove an exciting cause. An over-acid state of the primary digestive process in the stomach and duodenum may be thus provocative. The line of irritation here is not far to seek, the gastric branches of the vagus conveying morbid impulses to the circulatory centres in the medulla oblongata. For purposes both of diagnosis and prognosis in any given case, care must be taken to ascertain the degree of arterial tension present. Speaking generally, it may be affirmed that high tension pulses with intermittency are of more serious moment than the reverse, such conditions probably being significant of progressive damage to the valves and coats of the aorta. Again, the supervention of intermission in the pulse after sudden exertion is of graver import than an abiding condition of intermittency under ordinary conditions. The weak heart fails under stress, the sound heart rallies under this exertion. We may speak of two forms of intermittent pulse: (*a*) where the condition is constant, and (*b*) where it is only occasionally induced.

a. Constant Intermittency.—The patient is generally in middle or advancing life. He may be quite unaware of any cardiac irregularity, or may subjectively realize the thump of the organ as a more vigorous beat succeeds to the intermission. This condition is not of serious import in the absence of any marked signs of heart failure or arterial decay, and is compatible with advanced longevity. Chloroform commonly removes the intermissions, and a meal with some stimulant may often act similarly. Intermittency of the pulse is often associated with the gouty habit of body; it may be an abiding condition or only temporary. I am inclined to believe that the gouty habit induces irregularity rather than intermission of cardiac action, and I shall reserve what I have to say on this point till I come presently to discuss irregularity of rhythm.

b. The intermissions may be only occasionally present as the result of some dietetic error or dyspeptic condition, excess of tea, coffee or tobacco may induce this, and what is not an excess in any of these agents for some persons may prove highly provocative in others, who are readily affected by them.

c. IRREGULARITY.—*Irregular Cardiac Action*.—By this is signified irregularity of rhythm and inequality of tension. The pulse is irregular in force and volume. This is sometimes a temporary condition, due to dyspepsia more often than to any other cause, especially flatulent dyspepsia. Emotion may likewise induce this. Abuse of tea, coffee and tobacco may also be provocative. It is perhaps less common to meet with persistent cardiac irregularity than persistent intermittency apart from manifest organic change in the walls or valves of the heart, and when it occurs is probably of graver import. Prognosis in any case will depend altogether on the textural soundness of the heart. Though occasionally met with in fatty degeneration of the cardiac muscle, it is more often absent than present. The disturbances of the heart's action which depend on a gouty habit of body are very noteworthy. Irregularity of the pulse is apt to supervene after middle life. There may have been occasional intermittent action of the heart previously. The irregularity is very pronounced sometimes, and may persist for many years without the supervention of any detectible organic lesions save weakness. Attacks of overt gout and of gouty ailments, such as phlebitis, may occur from time to time. In such persons, suffering from chronic eczema, there is sometimes observed a return to regular action of the heart if the skin affection becomes active and itchy. This may happen again and again in the same patient.

d. INORDINATE FREQUENCY.—*Palpitation*.—The special significance of palpitation apart from organic disease varies greatly. The patient may or may not be conscious of undue or violent cardiac action. It is either temporary or persistent. Dyspeptic disturbance is often to blame for the temporary form. In the abiding varieties there is commonly profound nervous disorder. In accentuated form, the malady known as Graves' disease presents this as one of its three cardinal symptoms.

Paroxysmal varieties have been noted in connection with chronic rheumatic arthritis, of which I have noted several instances. Dr. Eales has lately directed attention to a form of the disorder associated with displaced and floating kidney of which I have not any experience. Dr. Samuel West has noted examples of paroxysmal heart hurry not dependent on any permanent recognizable disease of the heart, though temporarily accompanied by dilatation and murmur. Dr. Bristowe first called attention to cases of this nature, styling them instances of "recurrent palpitation of extreme rapidity in persons otherwise apparently healthy." It is probable that under the name palpitation several varieties of cardiac disturbance may have to be differentiated. Dr. Bristowe is of opinion that there is no essential distinction to be drawn between cases of palpitation characterized by simple rapid cardiac action, and those in which rapidity and irregularity are combined, and that the paroxysmal state may eventuate into a persistent one. In some of these cases the cardiac pulsations do not always reveal themselves at the radial artery. In several of those recorded by Dr. Bristowe there was organic disease, and in one there was hypertrophy and dilatation, although there was neither disease of the valves or degeneration of the cardiac muscle. Such changes as occur in uncomplicated cases Dr. Bristowe believes to be the consequence of the disordered rhythm, and not the cause of it. Many of them persist for years, some as long as fourteen years, but they usually end fatally, and sometimes suddenly, by syncope. Rapid pulsations may alternate with great infrequency in some of these cases, two hundred beats giving place to thirty-four in a few days in one recorded by Dr. Bristowe. The paroxysms are apt to come on without warning or any recognizable provocation, and may last a few minutes or hours, or even for months before an ordinary pulse rate is restored.

It is noteworthy that cases of this kind occur in middle life, and about equally in both sexes. Dr. West is of opinion that the symptoms are due to myocarditis, and, though nervous, depend on structural, though presumably temporary, changes in the muscular tissue, and he thus differs from Dr. Bristowe in his interpretation of their true nature. Certainly, a gradual failure of the heart is apt to supervene in these cases, and the prognosis in any given instance must be considered grave both in respect of renewed paroxysm and of the ultimate issue. As antecedents of several of the recorded cases, it is to be noted that rheumatism and syphilis figure, and that undue strain is often the exciting cause of paroxysms. These facts appear to me to justify Dr. West's views in respect of their pathogeny rather than those of Dr. Bristowe.

e. INORDINATE VASCULAR PULSATION.—This condition is well recognized as a functional disorder. It is found in the abdominal aorta in conditions of anemia, and after hemorrhage due to gastric ulcer. In persons during middle life, of both sexes, I have witnessed many examples, sometimes with dyspepsia in an atonic form, with hypochondriasis, and a tendency to oxaluria. Again and again I have had cases submitted for an opinion as to the likelihood of aneurism. In leukemia and pernicious anemia I have not met with inordinate pulsation in the large arteries. I have followed some of these cases—when death has supervened from other causes—to the *post-mortem* room, and have never found any gross morbid anatomy for them. The conclusion is therefore clear that they are dependent on disordered nervous conditions. No mere temporary state of diminished arterial tension will account for the symptoms. There must be some loss of vasomotor control. The associated nervous symptoms and antecedent neurotic conditions must not be ignored in most of the cases. I have never seen or read of a fatal issue as a consequence. The drugs which prove of any avail are such as act specially through the nervous system, and this fact also sheds light on the nature of the ailment.

Hysterical palpitation is a well-marked variety. Emotion, fits of bad temper and fright are provocative in persons already disposed. The gouty habit of body is certainly a cause. The palpitation may be entirely subjective, the cardiac rhythm not being really increased, but the beats forcible, and giving rise to loud sounds. Sometimes the beat appears to the patient to stop, and resume its action with a violent thump or sensation as of "turning over."

Examples of what is termed irritable heart come into this large category. These occur most frequently in young men who take violent exercise, and live hard in all ways. Both in the navy and army such cases occur, especially in the first years of service, and heavy drill and violent muscular exercise are to blame. No valvular lesion is found in these cases, but the action of the heart is violent, and indicates some degree of hypertrophy. Unless rest is secured for a long time in such instances some permanent lesion is certain to accrue, and many of the patients are dismissed from the services before recovery takes place. The young military recruit suffers more than the young seaman. The former is often younger than he avows, and has perhaps been poorly nourished; while the latter is more carefully selected and gradually trained to his duties. His dress, also, allows of less restraint to the circulation.

Graves' disease is an exquisite example of a cardio-vascular disorder dependent directly on neurotic influence. The latter is either inherited in some form, or acquired as the result of exhaustion by spanemia, poor nutrition or prolonged diarrhea. The disorder is, however, not to be considered in the class now before us, for there is certainly more than functional disorder here. There are several grades of it, some cases being temporary, others being very severe and fatal. Whether the primary nerve disorder lies in the sympathetic cervical ganglia or in the medulla oblongata is not yet determined. Balfour, of Edinburgh, teaches that nervous origin of any case of palpitation may be ascertained by making the patient exert himself. Extra exertion has the effect of subduing the rapid action. With organic lesion (such as fatty change) present, the contrary effect will ensue.

In the earlier stages of rapidly advancing chronic rheumatic arthritis, persistent tachycardia has been especially noted. The pulse may be as frequent as 120, or reach 200 in the minute, without any cardiac or vascular murmurs, and in the absence of pyrexia. Dr. Kent Spender, of Bath, has called attention to these remarkable symptoms, and my experience is confirmatory of his observations. Women appear to furnish most examples of this disorder. It is to be noted that this form of tachycardia is persistent, and not paroxysmal, and is hardly, if at all, amenable to ordinary cardiac sedatives. In the condition of the respiration known as "Cheyne-Stokes breathing," the pulse may become diminished in force and frequency towards the end of the respiratory pause, but irregularity is not usually noted; it is commonly of high tension.

In the superficial sketch which I have now presented to you, I have endeavored to consider only such conditions of cardio-vascular disorder as are, for want of a better term, called functional. There is as yet no morbid anatomy for them, yet for many of them the line is apt to be transgressed, and in time there are found changes in the direction of decay by atheroma, fatty degeneration with fatal issue. Have we not here the earlier manifestations of organic disease, changes indeed, but such as may often be recoverable if early detected and wisely treated? To my mind the line of breakdown—for such it is--appears to be in the central nervous system, involving the parts more especially which minister to the regulation of cardio-vascular trophic equilibrium: and here we have to do, so far as we know at present, with the centres in the medulla oblongata, and more especially with the vagi and sympathetic nerves. The inhibitory action of the vagi appears to be suspended. The peculiar association of tachycardia with the earlier symptoms of riotous chronic rheumatic arthritis appear to me to throw some light on many cases of disturbed cardio-vascular rhythm. I am convinced of the neurotic element in most cases of arthritic disorder, and as rheumatic disease is prone to fall on the motorial elements throughout the body, I feel sure that this morbid direction is determined mainly through the nervous system. I regard these failures in rhythm as expressions of decay, more or less, in the centres regulating these functions, and these may be temporary or limited, at times so little grave as to constitute recoverable conditions, at others so severe as to preclude hope of permanent relief. In some of these cases there is manifest inheritance of some neurotic condition which underlies and dominates the whole process.

There must never be a note of despair in any of our therapeutic efforts; and by attention to early symptoms; to restoration of healthy function throughout the body, we may hope to rescue many of the sufferers from these particular ailments. Naturally in this connection we resort to various cardiac and vascular sedatives of which digitalis and aconite serve us in good stead. Nutrient tonics such as iron, cod-liver oil and arsenic, are distinctly of avail. The digestive system being often in fault, demands especial attention, while the various bromide salts are often distinctly useful in combating the more overt nervous symptoms present in many of these patients. Amongst my hearers must be many who can illustrate from their full experience many of the conditions I have here tried to depict, and I call on them to do so, and to help forward our knowledge on this confessedly difficult and very important subject. Lastly, I would urge that, as practical bedside physicians, we paid good heed to what is for us of the last consequence—the treatment of cases such as I have described. We meet here not merely as *doctrinaires* or schoolmen, but as servants of the public and healers of the sick.

A CLINICAL LECTURE.

Delivered at the City and County Hospital, San Francisco, Cal.

By J. O. Hirschfelder, M. D., Professor of Clinical Medicine Cooper Medical College.

[Reported by Mr. Fischer.]

Floating Kidney.

The age of this patient is 40 years. He is a native of Sweden, and a sailor. When 9 years old he had an attack of rheumatism. He was at one time treated in London for Bright's disease of the kidneys. Two years ago he had a general edema, and passed a bloody urine. His condition improved and he was well for a time, but during last November his trouble returned. He then passed a bloody urine, containing over one per cent. of albumin, red and white blood corpuscles, renal epithelium, and a few hyaline casts. Tannate of soda was administered, but had no effect on the urine.

The urine that he has just voided is darker than normal; it presents the so-called smoky appearance. This smoky appearance may be caused either by the presence of blood or of carbolic acid. It cannot be due to the latter in this case, because the urine, as you see, does not give the usual amythest colored reaction of carbolic acid upon the addition of a solution of iron. On the other hand, it does respond to Heller's test, and to the guaiacum test, which prove the presence of blood. The nitric acid test shows that albumin is present, but not in such large quantities as it was formerly. The heat test, and the picric acid test, give the same result. The microscope reveals epithelial cells, granular and hyaline casts, and red blood corpuscles. Hence, we have here a urine containing albumin, blood, epithelial cells, granular and hyaline casts.

The sources and the causes of blood in the urine are as follows:

I. Urethra, from trauma, gonorrhea, polypus.

II. Bladder, from cystitis, trauma, growths, ulceration, calculus.

III. Ureter, from trauma.

IV. Pelvis of the kidney, from trauma, tuberculosis, abscess, calculus.

V. Kidney itself, from: (1) Trauma. (2) Exposure to cold. (3) Certain remedies, as cantharides, turpentine, and sometimes quinine. (4) Affections of the renal artery, as thrombosis, embolism, aneurism. (5) Affections of the renal vein, of the same character as the preceding. (6) Venous stasis. (7) Growths in the kidney, as carcinoma, sarcoma, tuberculosis. (8) Bright's disease, the acute parenchymatous form; sometimes in the chronic parenchymatous form, especially where an acute attack is superimposed. (9) Hemorrhagic infarctions of the kidney. (10) Constitutional troubles, as hemophilia. (11) Hemorrhagic infectious diseases. (12) Infection due to the invasion of parasites, like the filaria.

If the blood comes from the urethra, it will be found in the very first and the very last portions of the urine. If from the bladder, there is apt to be cystitis with it, and pus. It will then, also, be found in the last part of the urine, and irregular clots will be present. If it comes from the pelvis of the kidney, clots and casts will be found. If from the kidney itself, it will be ultimately mixed with the urine, the urine will be acid, and casts will be present.

In the case before us, there is a tumor in the right hypogastrium, extending vertically, oval in shape, perfectly smooth, and reaching down to the crest of the ilium. It is movable to the touch, and also moves with respiration. The tumor immediately adjoins the anterior abdominal wall. Normally, the kidney lies on the side of the vertebral column, covered in front by the intestines and the liver. If, then, the tumor is due to a kidney, it must be a kidney out of place. The size of the tumor, its shape, its smooth surface, and the throbbing of the renal artery, which is sometimes felt, all indicate this condition. Our diagnosis, therefore, is right floating kidney. Blood in the urine occurs only in a very small proportion of cases of floating kidney. Drummond found it in three of over thirty cases; I have seen several cases, and find it here for the first time. In a few days I shall show you this case again in order that you may see the consequences of the handling which the kidney has received from you.

In consequence of the severe manipulation to which the patient was subjected in examination at our last meeting, the urine has become bloodier than it was at that time. Hence, this experiment renders it more than probable that our diagnosis was correct, and that the blood comes from that kidney. The other points that led us to ascribe a renal origin to the blood were, that it was small in quantity and intimately mixed with the urine, and that hyaline casts and granular deposits were also found.

The kidney is normally situated in the lumbar region, extending from about the eleventh dorsal to about the second lumbar vertebra. It lies immediately adjacent to and underneath the liver, on the right ride. On the left, it lies in juxtaposition to the spleen and the stomach; lying behind the stomach, and below and behind the spleen. The right kidney, therefore, lies behind the liver, and the left behind the stomach. It is held in place partly by the peritoneum, which passes in front of it and is attached rather firmly to its capsule, but more especially by the fat that surrounds it. The kidney is surrounded by an immense quantity of fat, and this fat is a very important factor in the retention of the organ in its position.

Floating kidney is a disease of comparatively frequent occurrence, but it is more generally overlooked than recognized. It occurs more frequently in females than in males, the proportion being given by one authority as nine to one. It occurs at all ages, but most frequently in middle life, *i. e.*, from the twenty-fifth to the fortieth year. It is sometimes bilateral, but usually unilateral, and is more frequent on the right than on the left side. There are two forms of floating kidney, the congenital and the acquired. In the congenital, we have a mesentery, so to speak; that is to say, we have a kidney enclosed in the peritoneum like the intestine, and from this covering a layer of the peritoneum extends backwards. We are very apt then to find malformations of other kinds, especially of the blood vessels. The acquired forms are the more frequent, however. They are found more frequently in females than in males, and various causes are assigned for this fact.

In the first place the wearing of corsets has been regarded as an important factor, and that this should cause a displacement of all the abdominal organs may be easily understood. The most certain cause of floating kidney is a loss of the fat in its capsule. This fat is present in large quantities. If it be removed, the kidney has quite a range in which to move, and its motility becomes very great. Hence, when the fat has disappeared, a loosening of the kidney takes place, a shriveling of the peritoneum must readily occur, and we have the beginning of a floating kidney. In addition to the loss of fat, a condition that predisposes to the disease is a congenitally flabby condition of the peritoneum so that it readily gives way to forces that would otherwise be resisted. The corset is a very potent factor in producing this giving way. When a corset compresses the abdominal cavity, all the abdominal organs are forced together. The liver presses on the kidney, the kidney on the vertebral column; and as the kidney is prevented from ascending, it descends. Normally, when respiration takes place, the kidney does not move. The up-and-down movements of the liver have not much effect on the kidney. But if the kidney is displaced so that it is in juxtaposition to the lower edge of the liver, there is what may be likened to a continual hammering of the one upon the other.

Pregnancy is said to have a strong influence in the production of floating kidney. In consequence of the stretching of the abdominal walls in that condition, the walls become flabby, after birth, and all the organs descend. It is supposed also that with the congestion of the menses a congestion of the kidneys occurs, and that this may in some degree tend to loosen the kidney from its moorings. This, however, has not been proved. Other causes that are assigned are injuries; blows, the lifting of heavy weights, and so forth. All of these may have some effect in aggravating a preëxisting abnormal condition. But as to whether they themselves may cause it, we cannot say. Authorities differ on this subject.

Symptoms:—In the large majority of cases there are no symptoms at all. Their presence or absence depends first, on the degree of dislocation, and next on the secondary changes that have occurred either in the kidney or in the surrounding organs in consequence of the malposition of the kidney. Cases of malposition are divided into the following classes: (1) Those in which the kidney is palpable only on respiration. (2) Those in which two-thirds, or less, of the kidney is felt. (3) Those in which the entire kidney is felt. (4) Those in which the kidney has become adherent in an abnormal position. The first is simply a movable kidney; the second and third are floating kidneys, and the fourth is an adherent kidney. The floating kidney in the first stage would probably not cause much trouble. It might exist for many years and never be discovered. In other cases there is a feeling of discomfort in the abdominal cavity, which the individual is not able to localize accurately or to describe. In still other cases the symptoms are more marked. There is intense distress in the abdomen, there are dyspeptic symptoms, associated with the development of a large amount of gas, headache and vomiting. Or the symptoms may be still more severe; there may be intense abdominal pain, especially in the lumbar region, radiating to the back and abdomen, to the bladder, and to the testicle in the male and the vulva in the female. Or there may be strangulation of the kidney, with signs very similar to those of stone—nausea, vomiting, cold perspiration, pallor, great depression, and in addition radiating pains.

Sometimes the patient is ordinarily perfectly well, but experiences these symptoms when riding horseback, dancing or turning suddenly in bed. Ordinarily the urine is normal in appearance, though sometimes hematuria is found. Drummond states that in such cases renoliths are present. In the case before us, nothing seems to point to the presence of stone in the kidney, except the blood in the urine; and this can be explained by a venous congestion, due to torsion and obstruction in consequence of the abnormal position of the organ. The vein suffers more than the artery on account of its thinner walls, the artery being comparatively rigid. Hence venous stasis is more apt to occur than arterial. Sometimes a pyelitis occurs. In one case the displaced kidney became attached to the abdominal wall, and suppuration of the organ ensued. A surgical operation was performed, but the patient died; and as no *post-mortem* was permitted, it could not be determined whether or not the other kidney was normal.

Treatment:—No drug, of course, will be of any avail in restoring the organ to its position. The only methods of treatment are the use of bandages and surgical operation. The operation of stitching the kidney to the posterior abdominal wall was originated by Hahn, of Berlin, who has operated a number of times. Many of the patients died before their time, many were not relieved and only a comparatively small number of the operations were attended with any beneficial result. In order to made firm adhesions, considerable inflamation must be set up. And the trouble is that you cannot control an inflammation when once started here. If it goes on, suppuration ensues, and septic infection and death follow. On the other hand, if there is only slight reaction, there is but little adhesion and little benefit. Hence, conservative surgeons now look with disfavor upon the operation, and it is less frequently performed. As regards bandages, it may be said that it is very difficult to get an abdominal bandage that is worth anything. The efficient abdominal bandage is yet to be invented. In this case a bandage has been applied, consisting simply of a piece of pasteboard that has been wet and moulded to the form required, and then dried. In order to be of service, the bandage should be so padded that the pressure is exerted as much as possible from below upward.

I am pleased to be able to show you a second case of floating kidney, in a male, in whom the trouble was found accidently during the course of an examination. With this patient it is likewise the right kidney that is displaced, and you can feel the smooth organ readily in the right hypogastrium, just above the ilium. As you perceive, it glides easily under the finger. No cause is known for its occurrence. The patient has never lost weight, but in his occupation as a miner has been compelled to do hard work in the stooping position. The urine, as you see, is turbid, and upon adding caustic potash becomes clear and gelatinous. It therefore contains pus, as is proven by microscopic examination. We filter it and test with nitric acid, picric acid and heat, and you perceive a faint cloudiness in each case. The urine consequently contains a trace of albumin corresponding to the quantity of pus present. The reaction of the urine is acid. We conclude from all these signs that the pus comes from the kidney, and as the quantity of albumin is but nominal, that uriniparous structure is not involved, but that we have an affection of the pelvis of the kidney—a pyelonephritis. The affection of the kidney does not incommode the patient and we are therefore not called upon to resort to any vigorous treatment.

But pyelonephritis might be so severe as to endanger life, and the question of the removal of the diseased organ might be broached. In such cases it is very important to know whether or not the other kidney is sound. This question has been a very difficult one to solve, and various methods have been attempted to obtain urine from each kidney separately. Silbermann, of Breslau, has invented a catheter, from whose side a rubber bag is made to project and is filled with mercury after entering the bladder. By pressure he attempted to close the orifice of one ureter and thus obtain urine from the other. The instrument has not worked satisfactorily. I have an electric cystoscope made by Leiter, of Vienna, at whose base there is a tube through which a fine catherer can be made to enter the ureter under the guidance of the eye that looks through the cystoscope. On some future occasion I shall show you its mode of operation.

AN INTERESTING CASE OF ANESTHETIC LEPROSY APPARENTLY FOLLOWING VACCINATION.

By SIDNEY BOURNE SWIFT, Resident Physician, Leper Settlement, Molokai, H. I., and

D. W. MONTGOMERY, Prof. of Pathology and Clinician for Diseases of the Skin in the Medical Department of the University of California.

Peke, male, Kanaka, æt. 25, parents healthy. Has had two brothers and three sisters—one sister died at the Leper Settlement, a leper of the tubercular type. Peke has been a leper of the anesthetic type for ten years, seven years of which have been spent at the Leper Settlement. In 1878 he was vaccinated, and about one year after, symptoms of leprosy appeared, and there is now a large anesthetic scar at the site of this vaccination. He has, during his whole life, associated with lepers.

Sixteen months ago he was a fine strapping looking fellow, and was employed as policeman and grave-digger in the hospital at Kalawao. He then left the hospital and lived with a woman named Kalehua, who is now, and has been for the last fifteen or sixteen years, laundress to the hospital.[1] She was declared a leper two years ago. Within the last three months Peke has become pronouncedly ataxic.

A piece of skin was removed from the border of a typical lepra patch on the back about 2½inches to the left of the second dorsal vertebra. The border was slightly raised—inside the anesthesia was complete, outside of it sensation was normal. Going from the border to the centre of the patch, there was a gradual loss of pigment. The border was decidedly not tubercular, consisting only of a slight elevation which extended regularly around the patch. Careful microscopical examination failed to demonstrate the presence of lepra bacilli. The sections were left for two to twenty-four hours in Ziehl-Neelsen's carbol-fuchsin solution, and decolorized either by Lustgarten's method, Gram's method, or with a dilute solution of sulphuric acid, and then counter-stained with methyl-blue solution—neither lepra cells nor bacilli could be found. After staining the sections in alum-carmine the raised border was seen to be caused by the products of chronic inflammation. There were giant cells surrounded by small round celled infiltration in groups looking very much like the formation of tubercles, but as, after diligent search, no bacilli were found, it was concluded that they were simply the products of chronic inflammation probably non-specific, owing to trophic disturbance following leprous disease of the nerves. A piece of tissue taken out of the anesthetic vaccination scar was examined, but also with entirely negative results as far as lepra bacilli were concerned. It consisted only of scar tissue.

These resuls simply coincide with previous examinations of the skin lesions of the anesthetic type of leprosy—no lepra bacilli have ever been found in these lesions, although searched for by a large number of competent observers. In this class of cases the disease process is really in the nerves, and the skin lesions are secondary. Prof. Dehio, of Dorpat,[1] finds that even in the first indications of the tubercular type, no bacilli can be found. According to him the tubercle first makes its appearance as a small celled infiltration around the hair follicles and the sebaceous glands; these infiltrations by individual enlargement and by confluence form the complete lepra tubercle, and the bacilli are present only in this stage. If his observations be confirmed, it will furnish a rather strong argument to those who still persist in maintaining that the lepra bacillus is not the cause of leprosy, but a mere after product.

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[1] This woman is the case referred to by Dr. Z. W. Fitch, in his article on the "Pathology of Leprosy."

One of the most interesting points in this case is, that Peke had been vaccinated one year before developing symptoms of leprosy, and that the vaccination scar became anesthetic. Might it not be that with the vaccine virus, the virus of leprosy had also been inoculated? The ataxia of the legs is in all probability due to the disease attacking the peripheral nerves of the lower extremities, and interfering with the proper conduction of sensory impressions to the central nervous system, for leprosy is decidedly a disease of the peripheral nerves, extending slowly from the periphery toward the centre.

ABSCESS IN THE HEAD AND SHAFT OF THE TIBIA WITH LIMITED EXTERNAL SIGNS; EVACUATION; RECOVERY.

By D. D. Crowley, M. D., Oakland, Cal., Surgeon Oakland General Hospital.

Read Before the Alameda County Medical Association.

The following case of caries of the interior of a bone is one upon which I recently operated in the presence of a number of members of this Association:

N. S——, æt 23, called at my office on May 29, 1890, to be treated for severe pains in his left leg. In attempting to glean an intelligent history of his case, the following facts were obtained: When about eight years of age he remained in the water bathing a considerable time, and immediately afterwards had a chill, followed by fever. He also suffered from severe shooting pains in the vicinity of the knee joint. In about a week after the exposure, the leg was lanced, pus escaping. Every year, excepting 1889, he suffered from a dull pain in the leg between the cicatrix, where the abscess had been lanced, and the knee, a space of about five inches. This pain began upon the approach of warm weather, continued one week or ten days and disappeared. The pain was usually dull, though sometimes throbbing, and in his youth was so excruciating as to cause him to scream out. The patient, too, was inclined to take excessive exercise, and many times during those years in which he suffered for so brief a time, would, in the long intervals of apparently good health, take part in out door sports, and even during the past year walked between 30 and 40 miles in a few hours of one day.

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[1] St. Petersburger med. Wochenschr., Oct. 21, 1889.

At the date of my examination he had already suffered two weeks, and so intensely that he felt the necessity of procuring the services of a physician. Upon examination I found the cicatrix, which was referred to in his history, situated five inches below the knee-joint, and near the inner border of the tibia. Between the cicatrix and the knee-joint over the inner surface of the tibia, there was a perceptible elevation of tissue, this being the only point of difference from the right tibia. I have frequently observed this same elevation accompanying periostitis and osteo-porosis.

I concluded to keep the patient under observation for a couple of weeks to await developments. In the interim various applications were made to the leg, and alteratives were administered without perceptible benefit. I finally informed the patient that I believed the bone to be diseased, and that an operation ought to be resorted to.

On June 28th, in the Oakland General Hospital, assisted by the Surgical Staff, with Drs. Blood and Rodgers, I performed the following operation. Twenty-four hours beforehand the leg was shaved, washed thoroughly with soap and water, then with corrosive sublimate solution (1:1000) and kept aseptic until operative interference, by being dressed with corrosive sublimate gauze. An incision was made down to the bone over the inner surface of the tibia, superiorly to an inch from the knee-joint, inferiorly to within one-half inch of the cicatrix. The skin and periosteum appeared quiet healthy. The periosteum was then separated laterally from the bone to the extent of an inch throughout the length of the incision. And yet, with the bone denuded and superficial tissues well exposed, a casual examination would discover no pathological feature. To the touch of the bone chisel, the osseous structure was found remarkably smooth and compact, and not until this examination was carried on for several minutes could any morbid change in the textures be ascertained. Within two inches of the superior extremity of the tibia the bone was less compact, and while it is true that all long bones are less firm towards their extremities than in the shaft, yet at this point there did not appear to be the proper resistance. By the use of the mallet and chisel, an opening was made to the centre of the bone, through which a small stream of pus flowed, and when the opening was enlarged to nearly two inches longitudinally and one laterally, about four ounces of pus was drained from the head and superior end of the shaft. The cavity in the extremity of the tibia was three inches long, occupying the place of the entire cancellous tissue and medullary canal, and also infringing slightly on the compact tissue. It extended into the tuberosities and head of the tibia, and was separated from the cavity of the knee by only one-third of an inch of healthy bone.

During the operation, a small stream of 2 per cent. carbolic acid solution was directed upon the wound until every drop of pus had been removed, and until the roughened interior of the bone had been chiseled away. The cavity was finally irrigated with a 1:3000 corrosive sublimate solution and dried with antiseptic cotton. The cotton was shortly afterwards removed, and immediately replaced by a firm packing of carbolized gauze, plentifully impregnated with hydronapthol. As the periosteum was separated from the healthy bone, as well as from the diseased section for the purpose of exploration, and as it is known that the periosteum is an important factor in nourishing the osseous tissue, I felt it incumbent upon me to use considerable care in reüniting this structure. Hence, in suturing the soft parts, the skin fascia and periosteum were included in the same sutures; and they were well opposed over the firm antiseptic packing in the cavity of the bone, and in this way acted as a protective to the cavity dressings. Over the sutured wound, antiseptic gauze, rubber tissue, gauze, and absorbent cotton were applied, respectively, from within out, and firmly retained by flannel and starch bandages.

The patient recovered speedily from the anesthetic without nausea; and though pain was constantly present during the first twelve hours, it was not so severe as it had been prior to the operation, and quickly quieted down, until, on the second day, the patient did not experience the least inconvenience. The temperature decreased from an elevation of two degrees, which was present during the first 24 hours, to normal on the sixth day. Pain also diminished with the temperature.

Regarding the propriety of operating in a case presenting these symptoms, my chief guide was the history, which was imparted to me lucidly and intelligently by the patient. Yet, I could not overlook the slight increase of temperature which had been present, nor the tenderness elicited by pressure. I venture to assert, and with due respect to my colleagues, that many of them, after having made the primary incision, would have proceeded no further in the operation.

1103½ Broadway.

LAPAROTOMY FOR GUN-SHOT WOUND—AMPUTATION OF TWENTY-SIX INCHES OF THE ILEUM—DEATH.

By J. S. Wintermute, M. D., Tacoma, Wash.

E. C——, æt. 21 years, American, a plumber by trade and unmarried, upon the 5th day of October last received a wound from the bullet of a 44-calibre revolver. The bullet entered the back about 1½ inches to the left of the spine, struck the transverse process of the second lumbar vertebra, passed through the abdominal cavity, the anterior abdominal muscles, and finally lodged under the skin in the superficial fascia, about two inches to the left of the umbilicus. I first saw the patient shortly before midnight, and about an hour after the receipt of the above described injury, when he was in a condition of nervous collapse, and vomiting blood freely. Owing to the absolute want of the necessary operating facilities under which to operate immediately, he was made comfortable for the remainder of that night.

Early the succeding morning, at about nine o'clock, assisted by Dr. Jno. F. Beardsley, I first removed the bullet, and then proceeded, under antiseptic precautions, to perform median laparotomy. Upon entering the abdominal cavity, a large amount of clotted blood, undigested beans, and grapes in their entirety, with chylous material, greeted our anticipations. The ileum was found to have been punctured by the bullet seven times in twenty-six inches of its length. In two of these instances the ball had completely severed the calibre of the intestine. So mutilated did this portion of the intestine appear when exposed in our hands, that we immediately decided to amputate it. The mesentery was first ligated with a series of carbolized catgut ligatures, and then divided between the point of ligation and the margin of the gut.

After the gut was removed, the upper incised end was carefully placed within the lower, and united with five, closely placed, interrupted, catgut sutures, as suggested by Jobert. The abdominal cavity was then thoroughly sluiced out with hot water, and the abdominal wound sutured and antiseptically dressed. Little blood was lost considering the gravity of the operation, and the patient rallied fairly well after its termination. At five o'clock the same evening he semed to be suffering little or no pain; however, his case was practically a hopeless one, and even under the administration of stimulants he gradually failed, dying at about nine o'clock the evening of operation.

To my mind, the interesting points which are prominent in the foregoing case are: *First*—The number of punctures of the intestinal wall which the bullet made in so short a length of the intestinal tract. The entire tract was carefully examined, yet in no place was it injured except within the twenty-six inches exsected; even the mesentery remained intact, except at one point, where the bullet had penetrated it at the margin of the gut, admitting it within the exsected portion. *Second*—The fact that an earlier operation would undoubtedly have afforded the patient greater opportunity of recovery than under the circumstances heretofore described. His loss of blood through hemorrhage into the abdominal cavity, and by vomiting, prior to the time set for the operation, would not have been so great. The nervous shock which he was suffering from after receiving the wound would probably not have been materially augmented, and greater economy of his rapidly failing strength would have been possible under immediate surgical interference.

100 Tenth street.

BELLADONNA IN OPIUM POISONING, WITH REPORT OF TWO CASES.

By F. R. WAGGONER, M. D., Nevada City, Cal.

The antagonistic effects of opium and belladonna to which Bartholow, especially, has directed attention, are now generally recognized. As opium is a well recognized poison, often used with suicidal intent, it is of practical interest to know how far the antidote may be pushed without obtaining a counter lethal effect. The following cases, illustrative of this point, are therefore reported:

Case I—In September, 1888, I was called early in the morning to see a woman, æt. 45, thin and cadaverous, who was suffering from "cramp colic." I at once administered ⅛ gr. morphine, hypodermically, and left with her another ⅛ gr. tablet, to be taken if not speedily relieved. Upon calling again, about 4 P. M., I found her substantially dead. She was cold, cyanosed and pulseless, and beyond making weak respiratory efforts; was void of sensibility as the dead. I at once administered fld. ext. bellad. (ʒss) hypodermically. In a very few minutes there was a slight increase in the heart's action with accelerated respiration; skin gradually became warm and symptoms improved, until the respirations reached twelve, and the heart's action became fairly strong. There was still no evidence of consciousness, coma being profound. The effects of this injection lasted about three hours, when alarming symptoms—respiratory and cardiac failure, reappeared. I again administered ʒss fld. ext. bellad. hypodermically, when her respiration and heart's action improved more markedly than after the first injection, the skin becoming quite warm. Nothing further was required until 12 M., when the dose was repeated. The following morning at 5 A. M. an additional 10 drops was given. At 9 A. M. her condition was quite satisfactory, respiration normal, pulse full and somewhat accelerated, skin red and temperature apparently normal, but still unconscious. I made no effort to arouse her, and at 2 P. M., about 22 hours after the first injection of belladonna she opened her eyes and was soon fully conscious. Nothing further was done. She made a good recovery and suffered from no after effects of the 100 minims, of fld. ext. of bellad., not even complaining of any eye symptoms. It is not probable the ⅛ gr. morphine administered by me was sufficient to produce effects found in this case, as on a former occasion I had given her the same dose with the happiest results, but how she became possessed of an additional quantity I have no knowledge.

Case II—A healthy, well developed woman, 18 years of age, in November, 1889, took for self destruction one ounce tr. opium. This occurred late in the afternoon. I was not called until 8 P. M. An ineffectual attempt had been made to evacuate her stomach by emesis. No stomach pump had been used, and it was then too late; absorption had thoroughly taken place, and she was in very much the condition of the previous case, though coma was not so profound. Respirations 8, pulse weak and thready. Repeated flaggelation, with a strop, had been resorted to, but had now lost its efficacy. I at once injected half a drachm fluid. ext.

bellad. and repeated it every two or three hours until 110 drops had been given, the last dose being administered at 4 A. M. I was of course governed, as in the first case, by the heart's action and respiratory frequency, my object being to keep the latter up to 14 to 18, never suffering it to fall below 14. She was placed in bed and no other means for restoration attempted. At 2 P. M., some 20 hours after taking the poison she was fully restored to consciousness. She complained a little of her eyes and acted somewhat "foolish" during the afternoon, but rested and slept well during the night, when all symptoms had passed off.

The action of belladonna in these cases is purely physiological. It supports the respiratory centres and vaso-motor system until the opium can be eliminated from the system. In using this antidote, nothing short of a complete specific effect is sufficient. If this can be produced I believe that no one need die from opium poisoning.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal. and

HENRY GIBBONS, JR., M. D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Salpingo-Oophorectomy and its Results.—DR. COE having reported several cases in which, while this operation was successful, it did not relieve the distress for which it was undertaken, DR. H. J. BOLDT presents his experience in the same class of cases. The cases number 112. Of these, 58, or more than one-half, were cured; 24 were improved; 11 were not heard from or sufficient time since operation had not elapsed; 11 died, and 10 were not improved. Dr. Boldt refers to the necessity of time and treatment to eradicate the results of the disease after its cause has been removed by operation. Health and entire freedom from pain are not restored for a number of months—in some cases a year or more. This is due to the long and intense suffering that these women have endured, and which has profoundly depressed their nervous system.—*Medical Record*, May 17, 1890.

The Therapeutic Value of Antipyrin in some Diseases of Children.—DR. S. H. DESSAU, in discussing this subject, says that the only disease of children in which he has employed antipyrin as an antipyretic is pneumonia. In this he seldom resorts to it unless the temperature runs above 104° F. early in the attack, and there are symptoms of nervous irritation including a tendency to convulsive seizures. Besides the antipyretic effects antipyrin allays the nervous disturbance when not given too freely. It should be given in 2½ to 5 grains, repeated every hour for 4 hours—once in 24 hours. He prefers to have it administered towards evening, to secure sleep, as the result of its sedative action. If sleep takes place before all the doses are given, the rest is withheld. He has had the most marked success with antipyrin in the treatment of chorea, and corroborates the evidence of Dr. H. C. Wood in regard to its value in this disease. He has used antipyrin in 7 cases of chorea, 2 being still under treatment. One was cured in 1 week, 2 in 3 weeks, 1 in 4 weeks, and 1, the most severe of all, in 6 weeks. One case had previously been treated for 2 months with arsenic, bromide of potash, iron and digitalis without improvement. The beneficial effects of antipyrin might be inferred on the grounds of the evidence of the close relationship of chorea and articular rheumatism. Antipyrin has already acquired firm recognition as a reliable remedy in the treatment of articular rheumatism. For the past 2 years he has depended entirely upon antipyrin in pertussis, and has seen no reason for changing his practice. There were 45 cases, 2 being complicated with catarrhal pneumonia. They all recovered in shorter periods, or the attacks lessened in number and severity, than cases under former plans of treatment. Urticaria, of the more persistent form, does better under antipyrin alone or in combination with rhubarb and soda, than any other treatment.—*Archives of Pediatrics*, August, 1890.

Electricity vs. the Knife in the Treatment of Pelvic Disease.—DR. WM. B. SPRAGUE, at the close of a paper on this subject (*American Lancet*, August, 1890), sums up his conclusions as follows: (1) Myomata should receive a thorough trial of electrolysis before extirpation is attempted. (2) Interpolar electrolysis is sufficiently well established to expect good results if a strong current be passed directly through the tumor. Puncture should wait upon interpolar electrolysis. (3) Many cases of inflammation of the uterine adnexia are amenable to treatment by electricity. It should therefore be tried in all such cases before laparotomy is resorted to. (4) Some cases of pustules may be drained through the uterine orifice by electrolytic dilatation. Others should be treated by galvano-puncture through the vaginal wall. (5) Ectopic pregnancy should be treated by electricity as soon as the diagnosis is made, either by galvanism to kill the fetus, or by faradism to expel the same; provided, there is not actual or impending rupture of the tube, and the gestation has not extended beyond the fourth month. (6) Electrolysis is the proper treatment for cervical stenosis. (7) Galvano cautery is a superior means of extirpating uterine cancer in many cases. (8) Early diagnosis and treatment of endometritis by intrauterine electrolysis. will cure most cases, and prevent many cases of salpingo-ovaritis. (9) Electricity is a conservative agency, of great value in the treatment of most diseases of the pelvic organs.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Treatment of Cold Abscess and of Tuberculous Abscess About Joints.—DR. BRUNS injects iodoform in solution of olive oil in preference to ether or glycerine. He believes this treatment to be beneficial beyond doubt, having cured ten cases of spinal abscess, some of them containing from 1 to 2 litres of pus. Treatment takes from 8 weeks to 4 months before the cavity contracts. Some of his cases have been under observation for 4 years, without return of the disease. He believes that the iodoform causes the bacilli in the walls of the abscess to disappear and thus checks the cell proliferation, allowing a fibrous contraction.—*Annals d'Orthopédie*, May, 1890.

Trephining for Traumatic Cephalalgia of Six Months' Duration.—M. TERRILLON reports the case of an officer who received a violent blow on his helmet which only caused slight contusion without abrasion. Soon after he suffered from vertigo and pains in the head, which continued and became more severe, and at the end of the second month developed a most painful area at the upper and left part of the frontal region. After using various medicines and deep skin incisions over the painful point without success, M. Terrillon operated by trephining, removing a disc 3 cm. in diameter. The bone was much thickened probably by osteitis and the dura mater was injected; on incising it no deeper lesion could be found. Rapid recovery followed the operation, and the pain disappeared. There has been no return.—*L'Union Médicilo*, April 29, 1890.

The Treatment of Bullet Wounds.—M. ROCHET, after discussing the widely different opinions of the older surgeons, Paré, Sedillot, Larrey, Percey and others, who advocate the immediate removal of bullets, and those of Trélat and Verneuil, who advocate allowing them to remain, concludes that the danger of searching for the foreign body is often greater than allowing it to remain, since in case, of bad after-effects, endangering life, the search can be made then as well as at the immediate time of injury. He advises, however, immediate operation in case of wound of important organs where it is possible to reach the foreign body with the knife.—*Gazette des Hôpitaux*, April 29, 1890.

Cauterization of the Tonsils.—M. QUÉNU looks upon the operation of excision of the tonsils as unjustifiable in view of the success he has had with the cautery, the electric cautery being preferable. He introduces the point of the instrument deeply into the gland. Three operations at periods of 2 or 3 weeks are found sufficient to bring about a cure. This operation does away with the great dangers of excision, *i. e.*, hemorrhage, and the possibility of the amputated portion falling into the air passages. —*Gazette des Hôpitaux*, May 10, 1890.

Movable Kidney.—DR. KUMPF concludes that misplacement of the kidney is more common in women than in men, and in the right kidney than in the left. In 36 cases of movable kidney 29 were on the right, 1 on the left, and 6 on both sides. The means of fixation of the kidney are of two kinds: (1) Peritoneum, which forms a kind of pedicle. (2) The intra-abdominal pressure and aspiration of the diaphragm. Any cause which interferes with these may bring about displacement of the organ. Among these causes may be mentioned: peritoneum, traumatism, incomplete involution of the uterus, habitual constipation, etc.

Extirpation is not justifiable, as the mortality is 25 per cent. Palliative treatment by bandages and massage is alone indicated.—*Tribune Médical,* May 15, 1890.

Removal of Portions of the Liver.—DR. PONFICK, at the 19th Congress of the German Society of Surgery, April 10, 1890, finds from physiological experiment, that one-half of the liver may be removed in rabbits without causing any apparent change in the animal. When three-fourths of the liver was removed, a certain number of the animals died. After the operation, a point of great interest was noticed, *i. e.*, that the lost liver substance was little by little reproduced (from the capsule.) This Dr. Ponfick demonstrated from the specimens. The reproduction is very rapid. Eight days after removal 80 per cent. of new tissue was found. DR. WAGNER presented a specimen of liver removed from a woman, which was attached to the main body of the organ by a pedicle. The patient died from hemorrhage. DR. GLUCK gave as the results of his work on the subject, the following: (1) Ligature of the portal vein in the rabbit causes fatal convulsions. (2) One-half of the liver may be removed without danger to the life of the animal; hence resection is justifiable. (3) If both lobes of the organ be removed, death follows in from 4 to 5 days.

The Surgical Treatment of Impassable Stricture.—Wheelhouse's Operation.—Impermeable stricture of the urethra is a rare disorder, which has often taxed the ingenuity and patience of many eminent surgeons; and in days gone by has called forth many heroic and haphazard methods for its relief. It is the duty of the surgeon to see that no case is relegated to this unfortunate class until all treatment has failed, and many earnest efforts have been made to penetrate the contraction. All cases of chronic and obstinate stricture must be regarded as dangerous disorders; but with an impassable stricture the patient is ever exposed to the risk of many terrible complications, and with the highway to the bladder practically obliterated. If renal symptoms are present, no operation, however slight, can be considered as absolutely free from danger. Under any conditions the operation for relief is a difficult proceeding, and it is my practice to relieve, first of all, the retention by simple perineal incision, or aspiration above the pubes, and then to reserve the treatment of the stricture for a subsequent effort. Some years since Mr. Wheelhouse introduced a new form of perineal section for this class of cases, and this has superceded all the old heroic and dangerous dodges of finding entrance to the bladder without a guide. By his method the urethra is opened by a clean incision, about a third of an inch above the stricture, upon a straight staff, which has a very small beak on the opposite side to the groove. The canal is then stretched open with forceps. The apex of the incision is hooked up by rotating the staff and projecting the blunt little hook into the wound. Thus the incision is widely expanded and the operator looks into it in front of the stricture and searches for the distal orifice with a fine probe. By careful manipulation the passage is sure to be found. Sometimes the opening is hidden in a tiny fold, or buried in a deep crop of granulations, but the free movement of the point of the instrument is always a sure guide to the operator that it has entered the stricture. The contracted part of the canal must now be divided on its under surface and Teale's probe gorget, introduced along the director. A full sized catheter is then passed through the meatus and wound, and into the bladder. In this operation there are three points which require attention: (1) A clean incision must be made into the urethra. (2) The point of the probe must be manipulated with patience and gentleness. (3) The search for the orifice should be conducted in a good light, with the canal fully on the stretch. Cleanliness is the chief aim in the after-treatment of operations upon the urethra and perineum. The old fashioned method of dressing wounds after opetions by hot poultices has long been exploded, and the after-treatment of the present day really consists in carrying out the best method for maintaining perfect cleanliness with the least discomfort to the patient and a minimum of risk from septic disturbance.—JOHN WARD COUSINS in *British Medical Journal.*

Improvement in Surgical Results.—In the address in Surgery delivered at the recent meeting of the British Medical Association, MR. LAWSON TAIT, reviewing modern surgical practice, says: "What is wanted for the improvement of our surgical results is not any more theories, but better work and better systems of working, preceded by better systems of training. We forget that an art like surgery cannot be acquired by passing examinations. It is true that examinations admit to our academy schools in art, but they are merely for the purpose of selecting candidates upon whom it is likely that benefit will arise from the teaching which there can be obtained. Surgical art is not conferred upon the successful candidates by the College of Surgeons' parchment, the Membership, still less by that for the Fellowship. Like all arts, surgery requires some indescribable gift, easily recognized and appreciated when seen, but wholly incommunicable by diploma or otherwise. With that gift, the art may be acquired by persistent labor, but without the gift the labor is hopeless; and that this fact is being recognized in all our large centres of population, even in the close hospital corporations of the metropolis, is one of the most hopeful signs for better surgical results. Another hopeful sign is the demand for complete and accurate statements of results. My present desire is to urge in every possible direction a careful classification and publication of surgical results, as one of the best methods of improving them, for it is clearly necessary, first of all, that we should know what our results really are before we can see the necessity for their improvement; and secondly, it is only by the comparison of the results from different hospitals and different surgeons that it is likely that we shall start rivalry and inquiry as to the causes of better results.—*British Medical Journal*, August 2, 1890.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Extraction of Dislocated Lenses from the Eye.—DR. C. S. BULL states that it is possible in a majority of cases to extract a lens dislocated into the vitreous, by external manipulation, without the introduction of any instrument into the eye. He describes the necessary manipulation as follows: The lids are held open by a wire speculum, and the section made upward with a narrow knife. The speculum is then removed, and the upper lid lifted away from the ball with a wire elevator. Pressure is then made against the lower part of the eyeball, directly backward; the lens will be seen to rise and appear in the pupil. Sometimes it comes through the pupil; but occasionally a blunt hook or wire spoon becomes necessary. If continued pressure fail to push the lens through the pupil, or occasions prolapse of vitreous, some other method must be substituted. For a number of years he has not found it necessary to introduce a spoon into the vitreous chamber to remove a dislocated lens floating in the vitreous.—*Boston Medical and Surgical Journal*, August 7, 1890.

Treatment of Detachment of the Retina.—In investigating the statistics, DR. GROSZ found that treatment was without benefit in 65 per cent. of cases of puncture of the retina, in 44 per cent. of puncture of the sclera, 66 per cent. of iridectomies, and in 59 per cent. of pilocarpine injections. These results are not considered accurate, as many cases were not seen long after the operation. He also gives a tabulated statement of the results in Prof. Schulek's clinic during the past fifteen years. In that time 6,971 patients were treated in the hospital, among whom there were 67 cases of detachment of the retina. The sclera was punctured 21 times, with 4 cases of improvement, 3 of diminution of vision, and 14 were unchanged. Iridectomy was performed 18 times, with 7 cases unchanged, 6 improved, and 5 made worse. The retina was punctured twice without change in the vision. Pilocarpine was injected 16 times; there was no change in 10 cases, and improvement in 6. Scleral puncture and pilocarpine injection, simultaneously, 9 times, without change in 6, and improvement 3 times. Tincture of iodine injections, according to Schoeter's method, in 2 cases, without benefit. As a result of his investigations, the author concludes that pilocarpine injections are to be trusted most, as no diminution of visual acuteness had followed its use.—*Centralblatt f. pract. Augenheilkunde*, July, 1890.

Catamenial Irido-choroiditis.—M. TROUSSEAU reports the case of a woman, æt. 35, rheumatic, who for two years, during each menstrual period, had an attack of monocular iritis, accompanied with hypopion. She became pregnant, with suppression of menstruation, when the iritis did not reappear until eight months after confinement, but took place with its accustomed regularity at the second menstruation. The patient suffered from endometritis. The relation of cause and effect seemed conclusive. It was evidently an infective iritis, the seat of origin being the uterine cavity. The infection is slight, but undoubtedly is similar to other ocular infections which supervene during the puerperal state. The explanation of the infection attacking the iris, is due to the rheumatic diathesis of the patient. We know the irido-choroidital tissue feebly resists the rheumatic poison.—*Progrès Médical*, June 28, 1890.

SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

AND

DERMATOLOGY.

By D. W. MONTGOMERY, M. D., Professor of Pathology, University of California, San Francisco.

Transmission of Syphilis long after the Primitive Inoculation.—M. MAURIAC reports a case in which the husband had given syphilis to his wife 4 years and 9 months after he had first contracted a chancre. For 3 years after inoculation the man was under constant treatment by mercury and the iodides. He always anxiously awaited the time that he might marry without fear of infecting his wife. M. Mauriac, four years and a half after the inoculation, and knowing the thorough treatment that had been followed, gave consent to the marriage. When 4 months had elapsed the wife presented herself with a very evident reseolar eruption and mucous plaques.—*Gazette des Hôpitaux*, July 17, 1890.

Syphilis and Prostitution.—The *Bulletin de l'Académie de Médicin*, contains a memoir by DR. COMMENGE, on syphilis and prostitution. His statistics show that in the class of women, under regular medical supervision, less than 3 per cent. became syphilitic. While in the class of prostitutes irregularly under medical control, the percentage rose to 24 per cent. The result of the repeal of the Contagious Disease Acts in England, in 1885, and the cessation of the periodical visits of prostitutes, is shown in an increase of syphilis in English soldiers. Thus, of 14 stations under observation, the proportion was 27 per cent. in 1885. In 1888 this proportion had risen from 42 to 49 per cent., and even 61 per cent. at Windsor and 72 per cent. at Portsmouth.—*Journal Cutaneous and Genito-Urinary Diseases*, August, 1890.

Gangrenous Sores After Vaccination.—When any therapeutic or prophylactic measure is followed by disastrous instead of happy results, the case is in a peculiar manner interesting to the profession on account of the responsibility both legal and conscientious, involved. Vaccination comes particularly under this head. If a case of vaccination goes wrong, the physician is apt to hold himself responsible for the unfortunate outcome, and his patients are only too prone to blame him in any case. MR. JONATHAN HUTCHINSON, in his *Archives of Surgery*, for October, 1889, reports three cases of gangrene of the vaccination sore, followed in every case by death. In all three the suspicion of syphilis gave rise to an exhaustive investigation, and from the negative results of these, as well as some marked deviations from the typical course of an acquired infantile syphilis, he feels justified in stating that the poisoning was due to vaccine and not to syphilis—the vaccine virus taking on an unusual and malignant action. The first case is as follows: The infant had been vaccinated with calf lymph, and everything ran its usual course till about one month after vaccination the sores began to ulcerate, a mass of enlarged glands appeared in the arm-pit, and a periosteal swelling formed on the skull; some sores came on the anus and scrotum, and great improvement followed the administration of mercury. An otorrhea then supervened, and the child died in less than three months after the vaccination, with brain symptoms. He also cites two cases occurring in the practice of other physicians. One of these was a delicate hand-fed child of five months; the vaccination ran along normally for three weeks when the skin at the site of the operation turned brown and sloughed. The child died between two and three months after vaccination. The surgeon in charge of this case, Mr. Lucus, carefully investigated the facts with a view to excluding syhpilis, and came to the conclusion that the child died from a gangrene caused by vaccination. The next case was an infant four months old at the time of vaccination. About a fortnight afterwards there were two deep holes and much dusky swelling around the vaccination site, and at the end of a month the child was ill, the arm inflamed, and the ulcers were spreading.. An ulcer formed on the upper eyelid on the same side, and later one over the ear. The mother and child entered the hospital, and marked improvement followed the administration of mercury. On leaving the hospital a relapse occurred with the formation of large abscesses with sloughing of the skin over them. The child sank and died apparently from the abscesses, a little more than three months after vaccination. There was no evidence that the child had syphilis, either acquired or hereditary. In commenting on these cases Mr. Hutchinson gives the following as his reasons for not considering them syphilitic: "In none of the cases did chancres develop in the site of the vaccination sores. In true vaccination-syphilis the pocks usually run their normal course, and only at the end of a month or five weeks, and after healing has occurred, does the inflammation follow which constitutes a chancre. In one of these cases the spots inflamed within the week, and never developed vesicles. In another, the area was involved in gangrene as early as the third week; whilst in the third, the only one in which the dates might fit with infection at the time, the lymph was from the calf. In only one of the three cases was there any gland enlargment in the arm-pit, and this one again was precisely the one in which infection was the least likely, as the lymph was not from the human subject. In no single case was there any history of other patients vaccinated from the same source having suffered, and in none was there any suspicious evidence as regards the vaccinifer. In no one case did the infant develop a general eruption, such as is usually seen in cases of recently acquired syphilis. The process of gangrene of the skin which took place at the site of the vaccination punctures is one which, although not unknown in connection with primary syphilitic sores, is still very uncommon. In one case the child did not infect its mother's nipple, although suckling was continued, making it probable that the infant was not the subject of an acquired syphilis from which the mother was free. In the other two, as the children were hand-fed, no evidence of this kind was possible."

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

The Avoidance of Cocaine Toxicity.—HUMMER, of Geneva, has suggested the use of Esmarch's bandage as a preliminary measure to injecting cocaine into the tissues, when local anesthesia for an operation is required. By this means, he states, absorption of the drug is prevented, and the risk of toxic effects much diminished, while the local influence is prolonged and increased. Hummer also states that it is a good plan to let the wound, in an operation in which cocaine has been used, bleed a little before applying the dressing, in order that as much as possible of the solution shall escape. Bloodless operations are always dangerous, because there is no means by which the solution can escape from the tissues. The author carries out his plan as follows: He places an Esmarch's elastic tourniquet at the base of the finger, for example; then, with a Pravaz syringe, he injects at different points around the field of operation some drops of a ten per cent. cocaine solution, taking care by compressing the puncture apertures to prevent the escape of the solution. After the lapse of eight minutes the operation can be commenced. In adults, a dose of five centigrammes should not be exceeded; while in children of ten years, one centigramme would be the maximum dose.—*Medical Press and Circular*, June 11, 1890.

Olive Oil in Gall-stone Colic.—During the last few years clinical experience has been strongly in favor of the beneficial results following the use of olive oil in the treatment of gall-stones, but no adequate explanation has hitherto been offered. DR. D. D. STEWART suggests an explanation which certainly is ingenious. He believes that the effect possibly results from the decomposition of oils and fats in the duodenum into their fatty acids and glycerine; and he suggests that, as glycerine in the rectum causes hyperemia, irritation, and powerful reflex peristalsis, so in the duodenum it may cause energetic reflex contraction of the gall-bladder, cystic and common bile ducts, and perhaps may lead to a copious outflow of diluted bile, which would aid in expelling the stone. He believes a free flow of pancreatic juice is necessary for the splitting up of the oil, and that the failures of the oil treatment may, perhaps, be explained by the concurrent employment of belladonna or atropine, which suppresses the pancreatic secretions.—*Lancet*, June 4, 1890.

Ammonium Bromide Fumes in Asthma.—The value of the fumes of ammonium chloride in some varieties of bronchial and naso-pharyngeal catarrh, suggested the use of the bromide salt in the same diseases complicated with spasm. The ordinary solutions of hydro-bromic acid were found to be useless, for the purpose, and a strong acid, with a specific gravity of 1.7, was substituted. This, with a solution of ammonia, gave abundant fumes. In several patients suffering from asthma, a few whiffs relieved the dyspnea at once. In some cases, when used early, the inhalations aborted the paroxysms.—*Medical News*, June 14, 1890.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

The Treatment of Edema.—FUERBRINGER, in a paper upon the subject (*Berliner klin. Wochenschr.*, April 21, 1890), refers only to dropsy of cardiac, cardio-pulmonary and renal origin. The hydrops of cardiac affections is not always preceded by a high grade of venous stasis; not every insufficiency of the heart, however pronounced, conduces to the latter, and every stasis is not followed by edema. Valvular lesions followed by cardiac hypertrophy inhibit venous stasis and edema. The principal theories adduced in explanation of renal dropsy are the following: (1) Bright supposed that the hydremia, in consequence of albuminuria, led to a filtration of plasma through the blood vessels. Opposed to this theory are the facts, that persons may lose large quantities of albumin (after hemorrhages) without the development of hydrops; and further, in acute scarlatinal nephritis, where the excretion of albumin is slight, a high grade of hydrops is developed. (2) The "retention theory," supposes the hydrops to result from an increased quantity of blood. The theory is untenable, as hydrops in acute nephritis is developed, prior to the existence of plethora. The experiments of Cohnheim also show, that large quantities of salt solution can be injected into the vascular system without supervening hydrops. (3) Cohnheim sought a relationship between hydrops and local cutaneous changes, but as skin lesions do not always exist, this theory is untenable. From the foregoing it is evident, that no satisfactory explanation for the hydrops exists. Therapeutically Fürbringer seeks to eliminate the accumulated water in four ways: (*a*) by the sweat-glands, (*b*) by the kidneys, (*c*) by the intestines, (*d*) by mechanical (surgical) means. In the treatment of renal hydrops, diaphoretics are first prescribed and eventually the latter are used in conjunction with purgatives; if these fail diuretics are employed and finally surgical treatment. (*a*) External diaphoresis is attained by warm baths with subsequent packings, hot air and vapor baths, and hot moist packings. Late investigations show that sweat baths are the most, and moist packings the least potent. According to the method of Liebermeister, the patient is placed in a bath (temperature, 38 to 41° C.) for from fifteen to thirty minutes. This is followed by wrapping the patient in dry blankets, and as a rule, two pounds of sweat are lost. The urinary secretion is also facilitated by this method. Cardiac weakness, dyspnea, and pulmonary complications, contraindicate sweat baths. Even when the lungs and heart are relatively intact, sweat baths are occasionally followed by unpleasant symptoms. According to Reiss, prolonged warm baths are often of value. When anuria exists and the baths are ineffective, the case usually ends fatally. The use of pilocarpine as an internal diaphoretic is condemned, cardiac weakness, collapse and pulmonary edema often following its administration. (*b*) The diuretics act as heart tonics by increasing blood pressure, or by directly irritating the renal epithelium. The sovereign remedy in cardiac dropsy is digitalis. Fürbringer uses it for weeks and knows no condition of the heart absolutely contraindicating its use. No substitute of digitalis equals it in action. Lactose is not recommended. Mention is made of five other diuretics which may often be of value, viz: strophanthus, caffeine, theobromine, calomel, and the saline diuretics. Strophanthus only acts in recent and non-nephritic cases. Caffeine is more uncertain than certain in its effects. Theobromine (diuretin) is inconstant in action and often attended by headaches and vomiting; it, however, deserves further trial. In certain cases, when digatalis, strophanthus or caffeine fail to act, a combination of the three with acetate of potash, often yields good results. If even this is without action, then death is imminent. Of the saline diuretics, he prefers acetate of potash, which neither increases the renal hyperemia or favors the development of uremia. Calomel is only used as an ultimate remedy and in parenchymatons nephritis its results may be fatal. (*c*) The hydragogue cathartics are only used when the heart is strong in action. (*d*) The mechanical treatment is often followed by excellent results. Capillary drainage is for a limited time of value in anasarca. Better effects are secured by long and deep scarifications of the most dependent parts, followed by elevation of the limb. Cavity transudations must not be punctured too early. In ascites he has resorted to permanent drainage with relatively good results.—*Berliner klin. Wochenschrift*, April 21, 1890.

Chlorosis.—DR. CHARLES N. DOWD records the results of 31 cases of chlorosis, as they have been treated in the Roosevelt Hospital, New York. The patients were generally given five grain Blaud's pills (iii to vii t. i. d.) and oxygen inhalations (gallons x b. i. d.), with symptomatic treatment for constipation and other by-symptoms. The results of the blood examinations are summarized as follows: (1) There was usually an initial paucity of red corpuscles. (2) Under treatment it was easy to bring the red corpuscles to 4,500,000 per c.mm., and frequently higher. (3) The severity of the symptoms did not regularly correspond with the paucity of red corpuscles. (4) In the severer grades, microcytes, megalocytes, and poikilocytes were found, the average diameter of the corpuscles being below the normal. (5) The reduction in hemoglobin was a far better guide to the severity of the disease than the number of red corpuscles; it is so good a guide in chlorosis as to be sufficient in blood examinations for ordinary clinical purposes. (6) The hemoglobin increased regularly under treatment, but it was difficult to bring it above 85 per cent. of the normal. (7) No change was noticed in the white corpuscles. His observations also show the value of Blaud's pills, but this is so well established that there is no need for further proof. Improvement in the cases was general; complete recovery, rare. At least 17 of the 31 cases had relapses.—*American Journal of Medical Sciences*, June, 1890.

Bone Inflammation of Typhoid Origin.—PROF. FUERBRINGER in the consideration of this subject directs attention to the few observations made by the Germans, notwithstanding French writers in the last two decennia have repeatedly and exhaustively referred to this complication. In the year 1885, Freund, proved in a dissertation on this subject, that the inflammation of the bone owed its origin to the "bacilli of typhoid fever." The affection manifested itself in Freund's cases by severe and mild forms of periostitis and osteo-myelitis. The diaphyses of the long bones show a predeliction for invasion. A critical review of the literature by the author shows, that all the reported cases are not of typhoid origin. He observed this complication five times in about 1,600 cases of typhoid fever. The most interesting of these cases involves his own son, a boy 7½ years old, in whom during a period of 4 months there were 7 attacks, implicating 10 different bones. Osteoperiostitis is the term suggested by Fürbringer in designating the bone complication. The term "Periostitis postyphosa" is considered unsuitable because bone complications occur at times during the course of typhoid fever and may indeed appear as initial symptoms. In the symptomatology reference is made to the nocturnal exacerbations of pains in the affected bones.—*Muenchen med. Wochenschrift,* April 22, 1890.

Tenia and Measly Beef.—M. LABOULBÈNE has presented a communication on the increased frequency of this tapeworm and on the results of some feeding experiments to the Académie de Médicine. While the tenia solium which is introduced by measly pork has become rare in France during the last twenty years, thanks to the greater stringency of the sanitary police regulations for the examination of meat, the tenia saginata has greatly increased. The cause of this is twofold: the growing habit of eating underdone or rare beef, and the difficulty of recognizing measly beef without very careful inspection. The cysticerci and the bladders of the tenia saginata in measly fresh beef are considerably smaller and collapse sooner than the cysticerci of t. solium in pork flesh. M. Gabriel Colin, the Professor of the Alford Veterinary School, sent the meat of experimentally infected calves and steers to Paris for the inspection of M. Laboulbène. One portion was put in alcohol, the other left in an intact state, but exposed to the air before it arrived, on the morning after the killing. The cysticerci in the alcoholic preparations were more easily detected than in the fresh meat; they were, in fact, in the latter, no longer seen with the naked eye. The same observation was made in the meat of a calf which had been intentionally infected on the 12th, and repeated on the 29th of March, 1890, by putting scraps of measly beef into the milk which it drank. On the 30th of May it was killed, and its muscles from the tail to the eyes were found infected with cysticerci, their cysts ranging from 6 to 8 mm. in length. It was extremely difficult to dissect them from the surrounding fibrillæ of the muscles. The cysticerci itself, however, could be easily extracted by opening the cyst and applying gentle pressure. The worms showed the well known characters with their four hookless suckers, when examined microscopically. To distinguish them properly, it was necessary to put either the cysts or the worms in water, as by contact with the air they dried so rapidly that only a little white spot of about half a millimetre in diameter could be detected in the meat. Only where aponeurotic membranes covered the fibres and the imbedded cysts, this rapid desiccation was checked. Otherwise it was possible, even on a dried cut exposed to the rays of the sun, by previously driving pins into the meat close to the cyst, to recognize the white spots which correspond to the heads of the worms. By pouring on water, the cysts could be made to swell up and show again to the naked eye. The addition of some drops of nitric or acetic acid to the water facilitates the reappearance, and this procedure ought to be applied in all cases of suspected meat. M. Laboulbène thinks that a temperature of 50° to 60° centigrade kills the cysticerci with certainty. If raw beef is ordered for therapeutical purposes it ought to be finely chopped and pulped, and then passed through the meshes of a very fine sieve. In the discussion at the Academie de Médicine, DR. ROCHARD, of the French navy, said: that about ten years ago, on a

French man-of-war, at Beyrouth, the Surgeon's attention had been drawn to the fresh beef which the crew received as rations, by finding a number of them suffering from tenia saginata. The beef was found to be full of cysticerci, and the large pieces which had been cooked for making soup and bouillon after the French fashion, had evidently not been exposed to a heat sufficient to kill all the worms. M. Laboulbène explained the propagation of the larvæ by the spreading of human excrement as manure on pasture grounds and by the drinking water for the herds containing proglottides and ova.—*Semaine Médicale*, July 9, 1890. [Since Leukart, Mosler and Gerlach proved by feeding experiments that the cysticerci of the t. saginata are not developed in the pig, but only in the ox, they have also been found in the red deer, and Zenker succeeded in infecting a goat, which was found after three months to contain dead worms. In Syria and Egypt the t. saginata is frequently found in Hebrews and Mohammedans who abstain from pork. Gerlach frequently found the same tapeworm at Hanover. In Abyssinia and in the Cape of Good Hope, countries where scarcely any pork, but large quantities of beef are eaten, among the natives and white persons the t. saginata nellata is quite common. A decoction of the pomegranate bark is considered the best remedy, and in Abyssinia the natives take regularly every few months a dose of about 2 ounces of an indifferently tasting powder made of the bark of a leguminous tree, the albizzia anthelmintica.—A. A.]

Traumatic Neuro-psychosis.—In a contribution to this subject, DR. G. L. WALTON deals exhaustively with the questions of pathology and prognosis in injuries inflicted upon the nervous system by railway collisions and similar accidents. For a long time, from the influence of Erichsen's views, functional and organic injuries were indiscriminately classed together under the misleading term, "spinal concussion," and a common prognosis was given to all. To H. W. Page was due the credit of correcting this inaccuracy, and sifting out the comparatively rare cases of organic spinal disease, whose bad course and prognosis had been so long allowed to overshadow and include the more common cases in which no demonstrable lesion existed. Traumatic neurasthenia was the term applied to the latter class by him. Dr. Putnam, in 1883, called attention to the importance of looking for evidence of typical hysteria, in the chronic as well as in the acute stages, of so-called spinal concussion. Westphal advanced the idea that a diffuse sclerosis was set up by the jar, which view had many followers. Clevenger, of Chicago, in a recent work, proposed to give these cases the name of "Erichsen's disease." The writer has regarded the spinal sympathetic system as the starting point of the pathological process. Seguin, writing in 1889, considered organic injury to the nervous system a rarity, as resulting from the forms of trauma under consideration. It might fairly be concluded that there was at present a very general, though not unanimous, tendency to abandon the theory of spinal concussion, and to regard the majority of the genuine cases as identical with already recognized functional forms of disease rather than cases of organic spinal injury.—*Boston Medical and Surgical Journal*, July 17, 1890.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

Peculiarities in the Symptoms and Course of Neurasthenic Melancholia.—Neurasthenia is described by DR. MARCUS, of the Görlitz Asylum, as a change in the functional tonus of the whole central nervous system, with increased excitability and tendency to exhaustion. It is always attended with ordinary depression, brought about by the patient's feeling of incapacity, which leads to doubt and the fear of approaching insanity, anxiety and hopelessness, with a feeling of his own inadequacy to ordinary effort. These patients are neurasthenic before the outbreak of insanity—an important point. Neurasthenic melancholia is more common in women, and an hereditary neuropathic taint is not infrequently met with. The trouble begins by self-distrust and dread, often attended with imperative conceptions, leading to impulsive words or acts which are contrary to the patient's nature. Then follow ideas that he is himself bad. Imperative conceptions in these cases may simulate halucinations, which may after a time become actual, but usually there are no true hallucinations. For example, there may be a formless sensation of the sound of a word springing from the insistent idea which simulates halucination of hearing. Headache, sleeplessness, angina pectoris, and various vasomotor symptoms are often met with. After some weeks the patient becomes calmer, has doubts about previous matters of complaint, is hopeful of improvement, and begins to convalesce. Such patients are worse in the morning. They are prone to fall back into their old condition for a time, and to lose confidence. Then comes convalescence again and another relapse. This is characteristic of neurasthenic melancholia, other forms of melancholia gaining quite steadily when once convalescence sets in. With recovery from the melancholia, the neurasthenia may still persist. The patient should be warned of this, that he may not become too much discouraged.—*Allg. Zeitschr. f. Psych.—Boston Medical and Surgical Journal*, January 30, 1890

The Treatment of Morphinism and Chloralism.—In examining the semen of morphinists, the late PROF. ROSENTHAL, of Vienna, found the spermatozoa thin, short, and motionless; *i. e.*, he found present a toxic azoospermia, which disappeared after the morphine had been discontinued. The author availed himself of this observation in producing a psychic influence upon his patients, who by reason of these disturbances in their sexual sphere were more easily made to control their craving. Muriate of codeine was tried as a substitute for the morphine. In the beginning of the abstinence cure, ⅓ to ½ gr. of this salt with 30 to 45 gr. of bromide of sodium was substituted for an evening injection. Afterwards, this dose of codeine was given 3 to 4 times in 24 hours; the morphine being at the same time gradually reduced, ⅙ gr. of the latter being equal to ⅜ to ½ gr. of codeine. Codeine is said to produce sleep without stupefying, and to have no disagreeable after effects. Patients with the chloral habit (225 to 300 gr. per diem) suffered particularly from pains in the joints, disposition to diarrhea, dyspnea with angina precordialis, asphyxia, feeble-mindedness, tremor, sensory and motor disturbances. Upon withdrawal of the chloral, cannabis indica was substituted, and found to act especially well. It was given in the form of extract (15 gr. of cannabis with ext. rhei and aloes aquos. in 50 pills, 3 to 10 pills a day). This method also proved beneficial in treating the opium habit.—*Wiener med. Presse.—Centralblatt f. klin. Medicin*, April 19, 1890.

Monomania in Stealing.—A curious series of facts supplied to DR. PEDDIE by the late Sheriff Barday, of Perth, exemplifies phases of crime related to habitual drunkenness and to proclivities indicating insanity: Between the years 1844 and 1865 one woman was committed to prison 167 times for being drunk, and when drunk her invariable practice was to smash windows. Then there was a man, who when drunk, stole nothing but bibles. He was an old soldier, wounded in the head; when drunk the objects of theft were always bibles, and he was transported for the seventh act of bible stealing. Another man stole nothing but spades; a woman nothing but shoes; another nothing but shawls; and there was a curious case of a man named Grubb, who was transported for the seventh act of stealing. There was nothing in his line of life and nothing in his prospects, no motive to make him especially desire tubs; but so it was, that when he stole, it was always, except on one occasion, a tub.—*British Medical Journal*, May 10, 1890.

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 103 town districts of the State during the past month, in a population of 747,750, correspond to an annual rate of 18.03 a thousand, the total mortality having been 1,124. 200 deaths were due to zymotic diseases, giving an annual rate of 2.204 a thousand. Of these 32 were due to typhoid fever, 82 to cholera infantum, 31 to diarrhea and dysentery, 12 to cerebro-spinal fever, and 3 to whooping cough. 233 deaths resulted from diseases of the respiratory organs, giving an annual rate of 3.732. Of these 150 were due to consumption, 50 to pneumonia, 21 to bronchitis, and 12 to pulmonary congestion; the rate being for consumption and pneumonia, 2.568 and .804, respectively. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 600,250, was 16.82. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from San Diego.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M. D., San Francisco, Cal.

Summary for July.—Both temperature and rainfall for July varied but little from normal. With the exception of a trace along the coast north of San Francisco, no rainfall was registered, and the cloudy days and traces reported were due rather to fog than to rain clouds. The temperature has been mild, no extreme heat occurring in the valley belt, while, along the coast, the weather was cool, and there was an unusual freedom from both wind and fog.

California—Tabular Statement for July, 1890.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	71.5	106.0	44.5	93.7	56.0	37.7	0	.00	----	----	----	----	----	
Berkeley......... "	59.8	81.8	50.3	69.7	53.1	16 6	0	0.00	81.8	21	3	7	W&SW	
Colfax............ "	75 3	102.0	56.0	----	----	----	0	0.00	----	----	----	----	SW.	Southern Pacific Co.
Eureka........... "	56.7	65.0	48.0	61.1	52.3	8.8	2	0.08	94.0	6	13	12	NW.	Signal Service U.S.A.
Fresno........... "	82.5	111.0	56.0	100 9	64.1	36.7	0	0.00	30.4	30	1	0	NW.	" " "
Keeler. .... "	85.0	103.0	66.0	97.4	72.5	24.8	0	T.	26.4	27	3	1	S.	" " "
Los Angeles.... "	73.2	97.0	55.0	85.5	60.8	24.6	0	0.00	69.2	20	11	0	W.	" " "
Monterey .... "	59.9	76.0	50.0	----	----	----	0	.00	----	----	----	----	SW.	Southern Pacific Co.
Napa............ "	63.9	87.5	46.0	75.7	52.1	23.6	0	.00	----	26	5	0	S.	
Oakland......... "	61.6	88.0	49.0	----	----	18.3	0	.00	67.5	27	4	0	W.	
Paso Robles.... "	74.5	106.0	51.0	----	----	----	0	.00	----	----	----	0	S.	Southern Pacific Co.
Red Bluff....... "	80.4	110.0	58.0	96.2	64.5	31.7	0	0.00	35.4	30	1	0	S.E.	Signal Service U.S.A.
Sacramento. ... "	73.8	102.0	52.0	89.3	58.2	31.2	0	0.00	57.2	30	1	0	S.W.	" " "
San Diego....... "	68.5	80.0	56.0	74.4	62.6	11.8	0	0.00	78.9	17	9	5	S.W.	" " "
San Francisco.. "	59.8	80.0	49.0	67.1	52.4	14.7	1	0.02	81.5	18	13	0	S.W.	" " "
Santa Barbara.. "	67.2	83.5	53.0	76 5	58.5	18.0	0	.00	73.0	29	1	1	E.	
Santa Cruz...... "	69 5	93.0	50.0	----	----	----	0	.00	----	----	----	----	S&SE	Southern Pacific Co.
Yuma..........A. T.	92.2	115.0	74 0	105.5	78.9	26.5	0	0.00	42.6	15	16	0	S.	Signal Service U.S.A.

Blank (----) indicates data missing.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: SEPTEMBER, 1890.

ELECTRICAL EXECUTION.

The first electrical execution took place at the New York State Prison, at Auburn, on August 6th. As a scientific experiment it was not an unqualified success. As an execution it was, even from the worst aspect of the sensational press, as successful as 50 or perhaps 75 per cent. of executions on the gallows in this country. If, as is maintained, the culprit suffered "untold agonies," it was only for a period of 3½ minutes, that being the space of time elapsing between the turning on of the current for the first time and the second completion of the circuit. The *Medical Record*, of August 9, 1890, whose editor was on the ground, contains a very thorough account of the execution, and from it we obtain the following facts:

The apparatus consisted of a Westinghouse dynamo capable of generating an alternating current of 2,000 volts, a heavy oak chair in which the victim sat, and two electrodes, the lower one fastened to the back of the chair at a point corresponding to the hollow of the sacrum, the upper consisting of a rubber bell with a wooden handle, the bell at its upper part contained the electrode, the wire passing upwards through the handle. Both electrodes were of metal and sponge covered. The limbs and trunk of the culprit were fastened to the chair by straps, the head being secured by a leather mask formed by a forehead and chin band fastened to the back of the chair, leaving the nose, cheeks and mouth exposed. When everything had been adjusted the sponges were moistened with salt solution. The current was then turned on.

"In an instant the victim was apparently driven into a shrinking, crouching, rigid mass, with the exposed features in a grin, and the muscles of the entire body in fixed and rigid spasm. He remained in this condition for 17 seconds, when the current was interrupted and the muscles became relaxed with a momentary and quivering uncertainty. Then all was still and the patient was pronounced dead. Seventy-three seconds after the current was turned off a slight heaving of the chest was noticed, and this was immediately followed by slow, rhythmical, stertorous breathing. Although every sensation was abolished the forced breathing continued, and with each expiration a slight amount of mucus was bubbled through the closed lips. Notwithstanding the fact that directions were immediately given to turn on the current again, by some misunderstanding on the part of the one who ran the dynamo, this was not done until 2 minutes had elapsed. Then the same phenomena were repeated, and the culprit was kept under the full power of the instrument—1,400 volts—for 2¼ minutes, when all the unpleasant symptoms disappeared. As the result of this long-continued current the moisture in the sponge of the lower electrode became separated and resulted in the deep burning of the flesh at that point. As soon as the resulting smoke was discovered the circuit was at once interrupted. On examination of the body immediately after the interruption of the second current, Kemmler was declared dead by Drs. Carlos F. McDonald and E. C. Spitzka, the gentlemen who were appointed as the physicians by Warden Durston. The pulse had ceased to beat, the pupils were dilated, and upon the exposed portions of the face and the backs of the hands evidences of commencing capillary *post-mortem* changes were evident. Three or four minutes after the disconnection of the second current the eyes were examined again, when the corneæ were found to be depressed and the eyeballs flacid on pressure."

At the autopsy held three hours after death, the following appearances were found:

"Rigor mortis marked, particularly in muscles of jaw, neck, and thorax, and gradually extending from above downward, involving the feet and legs last. The *post-mortem* hypostasis was marked over lower portion of body extending up as far as the anterior axillary line, also on pendant surfaces of upper and lower extremities. Upper extremities partly flexed and rotated outward, nails showing *post-mortem* lividity. There was a seminal discharge which on microscopic examination was found to contain a large number of dead spermatozoa. There was an oval depression of the scalp upon the vertex, beginning at the anterior hair line and measuring four inches in its long and three and a half inches in its short diameter. Anterior to the posterior portion of the depression and in the immediate line there was a burn one and one-half inch in length and half an inch in width, superficial in character, slightly scorching the hair and crescentic in shape. On small of the back, corresponding to the level of the fourth sacral vertebra, below and second above, four and one-half inches in vertical diameter, and four and one-half inches in transverse diameter, was a burn presenting four concentric zones, of which the outermost had a pale area, corresponding to that of the rubber cup of the electrode and one-fourth of an inch in diameter. Succeeding this was a partial and complete vesication, partial below and complete above, about an inch in diameter above and one-third of an inch below. Then follows a transition zone, which is in its upper third a complete eschar, black in appearance, and in its lower part shows desiccation and is of a greenish brown color. An internal zone shows a number of vesicles, chiefly peripheral, and below the centre a black eschar, half an inch in its vertical and five-eighths of an inch in its transverse diameter. On incising the skin over the sternum the blood which escaped was unusually dark and fluid and remained so on exposure. There was no vermicular action of the intestine on exposure to the air or on irritation. The blood from the cut surface of the liver was of a crimson-like color. Abdominal organs were normal in position and appearance. The muscles of the thorax were of the usual color. Tar-like spots were noticed on the posterior border of the lower lobe of the left lung. Over half of the lung floated when placed in water, showing a marked emphysematous condition. The bronchi were normal in appearance and contained mucus and air-bubbles. The right lung was adherent throughout to the diaphragm. In the middle lobe of this lung there were numerous well marked tar-like spots. The spleen was normal in size and appearance. Both kidneys were intensely congested. The stomach contained a pint of undigested food. The gall-bladder was distended with bile. The heart weighed five and three-fourths ounces, valves were healthy. Bladder contracted. The scalp on being removed showed the vertex of the skull to be in a desiccated condition, corresponding with the contact of the electrode as previously noted, but of larger area, being four inches by four inches, the zone of the scalp being only two and a half by three inches, the long diameter being antero-posterior. On removal of the skull-cap the dura was normal in texture, somewhat dull in color, particularly over the area corresponding with the zone of contact. In the prerolandic region the meningeal vessels, measuring along the convexity antero-posteriorly four inches on the left side and three on the right, were filled with carbonized blood. On the internal aspect of the calvarium the meningeal vessels in the dura and their contents appeared to be black and carbonized. The carbonized vessels were so brittle that their ends were torn off with the calvarium and presented a broken, crummy appearance. This carbonization was limited in an abrupt manner. The other meningeal vessels contained blood of a crimson-like hue, corresponding to the outer burn previously described. Over the left hemisphere, one-third of an inch left of the median line, there was a deep carbonized spot corresponding with the carbonized portion of the calvarium. This charred spot corresponded to the dull-colored areas previously described. The pia and gyri themselves were of a pale buff color, the rest had the ordinary rosy injection of the ordinary cortex. While observing this anemic area it was noticed that its blood-vessels began to fill. The pia and arachnoid on the convexity were perfectly normal. An interesting fact was observed on handling the pons and medulla, in that they were found to be warm. By a thermometer inserted in the fourth ventricle, the temperature was noted at 97° F. This corresponds with an area of temperature on the back of the neck which was noted as 99° F., two hours after death, and 97½° F., three hours *post-mortem.* The smaller vessels of the pia were ectatic. Capillary hemorrhages were noted in the floor of the fourth ventricle, and the same condition in the third ventricle and the anterior portion of the lateral ventricle. The perivascular spaces appeared to be distended with serum and blood. The brain cortex in the area of contact was sensibly hardened to one-sixth of its depth, where there was a broken line of vascularity. The vessels over the corpus striatum showed enlargements in different parts of their ramifications. The pons was slightly softened. The burned integument of the back, on being removed, showed the spinal muscles underneath to be cooked, like 'overdone beef,' throughout their entire thickness. The spinal cord was removed entire, but showed no gross appearances of pathological condition."

In connection with this particular case, the points of chief interest to determine are: (1) Whether the culprit was immediately killed upon the first impact of the current, and that the respiratory movements continuing after the first intermission were independent of life. (2) Whether a state of profound unconsciousness supervened upon the first shock, to be followed by death when the current was again turned on. Upon the first point there is considerable difference of opinion, and the actual conditions present can never be determined. Upon the second proposition scientific opinion is unanimous, and reasoning from every source supports this view. It is not supposable that consciousness to external impressions would survive the momentary passage of even the lowest estimated current through the nerve centres, and innumerable arguments can be brought forward in support of this view. Whilst it is difficult to ascertain the precise truth amidst such conflicting statements and rumors, it is still very evident that an incomprehensible absence of system and completeness prevailed. The actual amount of current developed seems to have been much less than was intended, due, it is stated, to a test resistance being allowed to remain in the circuit. This, if so, was most culpable negligence. There is, however, no controversy over the stopping of the dynamo, or the more or less imperfect contact on the vertex, both of which are inexcusable. It also seems strange that to make assurance doubly sure, the current was not allowed to remain turned on for at least a minute, with frequent interruptions during the latter half of that period.

Viewed from any aspect the execution cannot be regarded as a failure, though for the sake of humanity and science it is to be regretted that the first trial of the new method was not perfectly successful. Instantaneous death by any method is practically painless, and there are a variety of modes by which this has been sought to be legally produced. It seems, however, that in English speaking countries executions must be bloodless, and hanging has therefore been adopted. The rationale of death by hanging is the production of dislocation of the cervical vertebræ, and when accomplished, this death is instantaneous and painless. The successful accomplishment of this depends upon a number of factors, and it is notorious that in many cases death takes place from slow strangulation, which is unanimously agreed to be horrible torture. The history of judicial hangings is prolific of disgusting scenes. From improper adjustment of the drop and size of rope, the head has been partially and even completely torn from the body. On many occasions the rope has broken, and the culprit has, after a considerable delay, been again hung. A most disgusting scene was witnessed in England some years ago, where through a number of accidents, death only ensued when the executioner threw himself upon the body of the criminal, completing strangulation by the additional weight. It will hardly be contended that with the foregoing accidents, death by hanging has any certainty of being instantaneous or painless. Indeed the character of the factors involved implies that success will be the exception.

Amongst painless and certain methods of producing death the "lethal chamber" or asphyxia by carbonic dioxide stands first. Its employment for judicial purposes has been strongly advocated, in this country, notably, by DR. ABBOTT. To this, however, DR. B. W. RICHARDSON, its inventor, in his *Asclepiad*, most decidedly objects on the grounds that it would be degrading the apparatus originally designed for the destruction of the strayed and unclaimed dogs of London. Death, though painless and quiet, is not as instantaneous as by electricity, and it certainly lacks the deterrant element of the latter. We do not advocate the death penalty, but believe very strongly in its abolition. Yet, whilst it remains, for every reason let electricity be the fatal agency, and the New York law faithfully complied with, be generally adopted in the United States. Amongst the excellent provisions of this measure are the location of all executions at one or more States Prisons, the privacy of the event, the non-publication of details, and the absence of that theatrical parade and publicity that has so often elevated the criminal as the hero of the hour.

NOTES.

The Hospital Idea in Asylums.

In the thirty seventh annual report of the State Lunatic Asylum at Utica, New York, Dr. G. Alder Blumer makes some excellent and thoughtful remarks on "the hospital idea" in asylums. Commenting upon the fact that asylums were becoming more attractive places for the treatment of mild and "border-land" cases that did not formerly find their way there, he says that if the sphere of asylum beneficence is to be enlarged, there must be a legal warrant for opening the doors to a wider class of patients. "It has not infrequently happened that brain-sick persons, not technically insane, who have sought advice at the asylum, would have only too willingly entered the wards for needed rest and treatment, but for that publicity attaching to commitment by process of law from which they have not unnaturally shrunk as an altogether unnecessary reflection upon them, 'must I be branded as a lunatic,' they enquire, 'before I can get relief?' * * * Shall we not seek and obtain statutory warrant to bid them welcome to our wards and ply them, at the moment most opportune for recovery, with all the resources at our command without subjecting them and their families to added suffering by reason of self-respect cruelly wounded? Can it be doubted that this latter attitude of a hospital towards the sick would tend infinitely towards its popularization." Dr. Blumer's suggestion of a change of name from "State Lunatic Asylum" to "State Hospital" is in accord with the foregoing, and if accomplished, would be a long step in the right direction. The recovery rate of the admissions at Utica (excluding cases presumably chronic when admitted) has been 53.17 per cent. This very forcibly bears out the idea and will be fully realized by those who have had occasion to frequently examine persons charged with being insane. In California, if the Commissioners are in doubt as to the positive insanity of the person and hesitate to certify, there are only two courses open, to remand the sufferer to the jail, or send him to the county hospital; the former is simply barbarous, while the latter is positively dangerous, owing to the absence of provision for safe detention. Were the fact generally recognized by the public that asylums were places of treatment and not of confinement, that they bore only the same relation to the mentally deranged that a general hospital does to a fever patient, there would be a far larger proportion of recoveries in mental disease than we can now record. Dr. Blumer deprecates unnecessary restraint in the transportation of the insane, as this can often be obviated by the employment of additional assistance—a safer and far preferable method. He also calls attention to a most necessary provision, though often overlooked, that women be always accompanied by a person of their own sex.

Electric Shock.

The *Daily Report* of August 6, 1890, mentions that "one man in San Francisco has passed through what Kemmler did, and yet survives." Cases of this kind are just now of special interest, and the particulars as furnished by Dr. Geo. B. Somers are worthy of record: On April 16, 1890, Mr. B. C. Van Emon, aged about 28 years, was engaged in making repairs in the power room of the Pacific Electric Power Company. He mounted a ladder in order to attach a "jump wire" to the main wire. While twisting the wire with pliers, the ladder slipped and he involuntarily grasped an iron bar, on which the main wire was grounded. He at once received a powerful shock and fell to the floor, a distance of eight or ten feet. He states that the shock produced immediate unconsciousness, and that he remembered nothing till he began to recover. He then felt stupid, unable to collect his thoughts, and had a heavy feeling in the back of his head. He thinks he remained unconscious for nearly a half hour, for he remembered noting that it was about 11:30 A. M. before he mounted the ladder, and he was found lying on the floor by some employes who came into the room shortly after 12 o'clock noon. His right arm and leg showed several bruises due to the fall. His wrists were lame and his arms and neck were swollen and sore for several days after the accident. For about a week he was unable to turn over in bed without assistance. The heavy pain in the occipital region lasted for about two months. Where the bar came in contact with his fingers, the flesh was so burned as to leave small cylindrical openings exposing the bone. At the time of the accident his hands were fairly clean and not very warm or moist. Mr. N. S. Keith, President of the Electrical Engineering Company stated that the Pacific Power Company were using a Keith constant current dynamo at the time, having a maximum voltage of 2,000 volts. It was making 1,000 revolutions a minute and the estimated strength of the current was about 15 amperes, but no measurements were made, either before or after the accident. The work being done at the time was the driving of electro-motors in various parts of the city. Mr. Keith stated that the strength of the current which Mr. Van Emon withstood depended on so many factors that it would have been almost impossible to measure it exactly. The Keith dynamo has 84 sections in the armature, which running at 1,000 revolutions a minute would make the interruptions 84x1,000, or practically a continuous current, differing of course completely from the alternating or "death current." The case is chiefly of interest as demonstrating the painlessness of powerful electric shocks. If the current had been an alternating one, its exact strength would have been of great interest. This case is very similar to that of Mr. William Sharpe (MEDICAL TIMES, Vol. III, No. 10), who received a severe shock by also getting into an electric motor circuit, supplied by a Wiesse dynamo. In his case the current was measured before and after the accident, giving a maximum voltage of 1,400 to 1,440 volts, or 20 amperes. It will be observed that both gentlemen agree that they did not suffer any pain.

SOCIETY PROCEEDINGS.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, May 27, 1890.

The President, J. F. MORSE. M.D., in the Chair.

Anencephalus Fetus.—DR. ST. GEORGE GRAY read the following notes upon a case of anencephalus fetus, exhibiting the specimen. Last January, a lady called at my office to make an obstetric engagement. This was her second pregnancy, the first having ended in abortion at the fourth month, five years ago. Last menstruation, 19th August, 1889—might expect her confinement about the 26th of May. The condition found on examination corresponded with her statement. I examined her again on the 29th of March and on the 5th of May. On the last occasion she told me that on the night before about a gallon of water had come away from her, and that she felt much relieved afterwards. I found on examination that the uterus had sunk lower down in the pelvis, cervix soft, os closed, cannot ballotte the head, but can distinctly feel a shoulder and elbow from the vagina. Heart sounds feebly audible just above the symphysis pubis on the left side. On the 10th she was delivered of this fetus. The child was born before I arrived at the house, but the nurse told me that labor was easy, one arm being the presenting part. The placenta was normal in structure and situation. The condition of the fetus explains why it was that throughout the whole period of gestation I could never ballotte the head, which puzzled me considerably. Authorities state that when there is an anencephalous fetus, the fetal movements are very lively, owing to irritation of the medulla oblongata, which is exposed in these cases. In this case the movements all through pregnancy were slow and comparatively feeble, contrasting strongly with a perfectly normal case that I attended a short time before. A few years ago I had an almost identical case, as far as the external appearance of the fetus is concerned. In that case the child was born before the membranes ruptured, the placenta and child being expelled at the same time. In looking up the subject at that time, I found that Professor Shepard, of Montreal, had made a series of dissections of anencephalus fetus, and had discovered that nearly all of them had musculi sternalis more or less perfect. I made a dissection of my specimen and found a well developed sternalis muscle on each side. Its nerve was a branch of the superior anterior thoracic, showing that it belonged to the same group as the pectoralis major, and was not, as some have asserted, a prolongation either of the sterno-cleido-mastoid, or of the rectus abdominis. I have made a partial dissection of the anterior chest wall of this subject, in the hope of finding musculi sternalis, but I have been disappointed, as this fetus has no such muscles.

DR. R. BEVERLY COLE could readily understand how difficult it must have been to recognize the presentation, but the finger-shaped projection of the membranes would indicate the existence of some form of malpresentation. Such labors were usually very tedious, from the imperfectly formed bag of waters not being a good dilator.

DR. GRAY said that in neither of his cases was the labor tedious, in all of them the placenta and fetus having been expelled simultaneously.

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

The Annual Meeting of the British Medical Association.—The President's Address.—Address in Medicine.—Address in Surgery.—Section of Psychology.—Section of Anatomy and Physiology.—Management of Lingering Labor.—Gonorrhea as a Cause of Inflammation.—Surgery of the Arterial Trunks.—Treatment of Acute Intestinal Obstruction.—Section of Dermatology.—Section of Pathology.—Annual Dinner and Receptions.

The fifty-eighth annual meeting of the British Medical Association commenced on July 29th, and as I write is just concluding its sitting. The meeting has been successful, although no event has given to it any special character or unusual brilliancy. The Congress was opened by Dr. W. F. Wade, the President, in an address which was entirely devoted to the discussion of the present regulations in force in the United Kingdom for the government of medical education, and especially of preliminary education—pre-technical education, as he termed it. The General Medical Council at its last meeting recommended that in future all colleges should require all students to give five instead of four years to the course, and teachers at both ends of the curriculum are demanding that the extra time or some part of it should be given to them. The lowest age at which a qualification is attainable in this country is 21, and it has been generally considered that the extra year must increase this age to 22. Dr. Wade practically set himself to show that this need not be, and that by revising the curriculum it would be possible to pass a boy at the age of 15, straight from the upper classes of a primary school into a science department. To curtail the number of subjects would not necessarily be to lower the standard of medical education, and the Jonah to be thrown overboard, according to Dr. Wade is—Latin! A shiver of horror ran through the assembly as the President unfolded his argument, but everyone had to admit that the argument was ingenious and founded on somewhat novel premises. Dr. Wade had been studying the subject with the assistance of the head master of one of the large primary schools in Birmingham. All the boys who were in the highest class and who had shown sufficient intelligence to be recommended for instruction in certain additional subjects, beyond the compulsory curriculum, were taken; the boys formed about 50 per cent. of the boys of their class. Their average age was a little over 13 years, and it was found that they could have passed in rather more than half of the medical preliminary examination. In two years more they might have passed in all but Latin; therefore, says Dr. Wade, away with Latin! We are asked to write prescriptions in Latin, to give directions to the dispenser in Latin, and instructions to the patient how the drug was to be used in Latin. Now almost every one has taken to the custom of writing the instructions to the patient in English, and in the pharmacopeias of all countries the names of drugs are given in the vulgar tongue. The sort of acquaintance with Latin which the ordinary medical student has, is, he argued, of no value as an education for the mind, and he quoted the following striking statement recently made by Mr. Gladstone—an accomplished classic—in some evidence given before a committee of the Flintshire County Council. "In my opinion, classical education is in itself the very best of all for all those who have a certain tendency towards it, and those whose circumstances are such as will enable them not to be content with the merest rudiments, but who will proceed to the point at which they will realize some solid attainments. Terrible errors have undoubtedly been committed in the past—and in the past I include the days of my own experience—in endeavoring to thrust the classics down the throats of everybody of a certain rank, quite irrespective of capacity and circumstance. I always bear this in mind * * * that the main purpose of education is to make the human mind a supple, effective, strong, available instrument for whatever purposes it may be required to be applied to."

The address in Medicine was given by Sir Walter Foster, M. P., who is Professor of Medicine at Birmingham, and also a somewhat conspicuous Gladstonian politician. His address was a discursive review of the relation of modern medicine to public affairs. He sketched the decline of the spirit of mere scepticism in medicine, and the growth of the experimental method, and showed how great an influence the new departure had had not only on medical thought and medical methods, but also on public opinion, and on legislative enactments.

The address in Surgery by Mr. Lawson Tait was rather disappointing. It was well delivered, contained many good points which were well made, and eagerly taken, but it was discursive, and did not deal with the subjects on which he is an authority. He also fell foul of modern medical education, and vehemently protested that too much time is given to biology. He growled at the teachings of physiology, but reserved his strongest adjectives for the senseless methods of teaching anatomy which are still so common. His remedy is the reëstablishment of the apprenticeship system, supplemented by practical instruction in a carpenter's shop to learn how to saw, and in a blacksmith's shop to learn how to hammer! Hereupon followed a very striking and well-worded disquisition on that well worn theme, the use of anesthetics in surgery, and the revolution in surgical methods and possibilities which have been worked since "that memorable night in Queen street (Edinburgh), when Simpson, Keith and Matthews Duncan 'were all under the table in a minute or two' to quote Simpson's own graphic description." He forcibly described the advantages of specialism in surgery, and pleaded strongly for a more thorough, exact and uniform system of recording results. Mr. Tait evidently strove to do justice to his rivals, and after all that has passed, it was pleasant to hear him say: "To Sir Spencer Wells is most undoubtedly due the credit of putting the publication of surgical results on a business-like basis and the extension of this ought to be encouraged in every possible way. When the results in abdominal surgery, which began to be obtained about twelve years ago, were first published, they were so amazing that the favorite criticism of them was that they must be lies—a complimentary method of criticism, which it may be mentioned was meted out to Ephraim McDowell. This sort of thing at first was very irritating and used to make me very angry; but for many years past I have ceased to trouble about it and the incredible things of eight or ten years ago are now matters of every day experience. My present desire is to urge in every possible direction a careful classification and publication of surgical results as one of the best methods of improving them, for it is clearly necessary first of all that we should know what our results really are before we can see the necessity for their improvement; and, secondly, it is only by the comparison of the results from different hospitals and different surgeons that it is likely that we shall start rivalry and inquiry as to the cause of the better results." He urged that by a uniform and systematic way of working, surgeons might quickly settle some questions of practice which are at present undecided, and are likely to remain undecided so long as every surgeon is continually changing his methods. "Take the case of the kidney. We have half a dozen men discussing such a question as that of removing a suppurating kidney as a primary operation or subjecting it to a primary drainage, and when you have heard all that they have to say you are no wiser on the subject. But if four men would subject all their cases to one method, and four others would confine all their work to a second method, within five or six years the question would be definitely and finally settled, and the probability is that we should have determined as a definite conclusion that in all certain well-defined cases the best treatment was the first method, whilst in another class we should probably discover that the alternative was the better choice. The latest instance of this kind is the question of lumbar *versus* inguinal colotomy, concerning which I am certain that the shield has a silver as well as a golden side, and that our present method will never enable us to differentiate the two methods." The most characteristic passages in his address were some concluding remarks on the modern rush after new remedies. "For my part, I instinctively distrust men who are always going in for new drugs, and for myself I will have none of them. In our surgical results there is too much of the same thing. Take the case of Dieffenbach's operation for squint, a most useful proceeding judiciously applied over a limited area. But I remember the time when every urchin with a squint was collared in the street and walked into the operating room to have one rectus divided in order that its opponent should have full power to swivel the eye out in the opposite direction. Everybody was "doing squints." Similarly when removal of the uterine appendages was proposed, but long before the just and true principles on which it is now based could be formulated, everybody rushed into the trial of it, and the result was a disastrous epidemic, the chief burden and discredit of which fell upon me. I was more horrified than I can tell, and much of my time was taken up in disclaiming the doubtful honor of what was called "Tait's operation," in the performance of which every principle advocated by Tait was neglected or deliberately outraged. If the men who engaged in this work had waited for a reasonable trial, a fair discussion, and a just verdict, much discredit for our art would have been spared us. The just verdict has now been arrived at, and the misrepresentation of which this operation was the centre has now ended.

The Section of Psychology, which is always well attended and full of earnestness and enthusiasm, was opened by Dr. Needham, the Principal of the Hospital for the Insane, at Gloucester, in an agreeable address, in which he drew attention to the improved methods of treatment of insane patients, especially dwelling on the establishment of workshops, of farms and gardens, the encouragement of physical exercise in outdoor games also, and the improvement of the asthetic surrroundings of patients. "A man will spit upon a sanded floor, but he would at least hesitate to do so upon a Turkey carpet. The parts of an asylum which show the least signs of destructiveness are those in which the construction, though strong and solid, is unspecial and homelike, the decoration bright and attractive, the furniture comfortable and convenient. Where pictures and ornaments are bestowed with a lavish hand, and the surroundings generally are too good to be suitable for destruction, we have all of us seen the transformation of a dull, bare corridor or room into one full of cheerfulness and light effect a simultaneous transformation in the habits of its inmates. The things worth preserving have been preserved. The better surroundings have seemed to induce increased self-respect and improved habits. The multiplied objects of interest have excited attention and given food for thought, and the result has much more than fulfilled anticipation." He pointed out that one result of improved methods of treatment, using that word in its widest sense, had been to increase the number of cases, especially of cases of chronic dementia sent into asylums; in consequence it was difficult to give any reliable statistics as to the results of treatment, an increasing proportion of the patients suffering from forms of insanity which were by their nature incapable of being completely recovered from. Some statistics drawn from the Gloucester Hospital, however, were given, which were of special value, since the same conditions had been maintained throughout a period of 30 years and all the patients drawn from the upper and middle classes. The hospital has only had a moderate percentage of epileptics and general paralytics, and aged persons had not been crowded in to save the expense and trouble of home nursing. During the 30 years the death rate had fallen from 14.5 per cent. in 1860–'64 to 3.4 per cent. in 1885–'89, and the recovery rate had risen from 23.9 in the first quinquennial period to 54.4 in the last.

The work of the Section of Anatomy and Physiology has been to some extent amalgamated with that of the Anatomical Society of Great Britain and Ireland, which arranged to meet at the same time and place. Professor D. J. Cunningham, of Dublin, opened the proceedings by an interesting address on the development of the convolutions and fissures of the brain; after passing in review a number of theories, he concluded by adopting and defending the physical explanation suggested by Jelgersma. The grey cortex of the brain increases by surface extension, and as it increases the subjacent white matter must also increase; if then the surface of the brain were to increase four times and to remain smooth, there would have to be eight times as much matter, that is to say, at least twice as much as is wanted, consequently the surface must fall into puckers. This very simple and obvious theory was taught by the late Professor Sharpey, the father of British physiology, and it is curious to see so much made of its rediscovery by a German. We have not, however, the knack possessed by our Teutonic brethren of making a great fuss over a minute, and elaborating, proving by learned disquisitions what is obvious to any one who gives a moment's thought to the subject in hand.

The sectional work has been carried on with much spirit. A very animated debate took place on the first day in the Section of Obstetrics and Gynecology, on the modern methods of managing lingering labor. Dr. W. S. Playfair introduced the discussion by giving a masterly review of the changes of late years made in the rules which guide practitioners in certain constantly recurring difficulties. He commenced by inquiring in what respects his own views in 1890 differed from those he was taught as a student some five-and thirty years ago? He considered in the first place, what might be done in labor prolonged in the first stages by a rigid and undilated cervix. Extracts from the textbooks of the day were given to show that labor was not considered as even tedious unless it had lasted twenty-four hours, and the rules given for treatment were criticized. The use of opiates, chloral, quinine, and mechanical methods of dilating the cervix were then discussed. The modern practice in prolonged second stage, the head being in the pelvic cavity, and the labor simply delayed from uterine inertia, was then considered, the two most prominent changes being the almost entire disuse of oxytoxic drugs, and the more frequent use of the forceps. The former frequent employment of ergot was illustrated, and its entire prohibition in the chief lying-in hospitals at the present day was shown. The author then described the employment of pressure on the uterus in protracted second stage, illustrating this by the obstetric customs widely prevalent amongst savage tribes. Its indications, and the method of using it, were then considered. Finally, the frequent application of the forceps in the present day was contrasted with the practice in the early part of the century, and the proper use, and occasional abuse, of the instruments were discussed.

On the following day a discussion on the importance of gonorrhea, as a cause of inflammation, was opened by Dr. Granville Bantock, who, after discussing the views of Noeggerath, MacDonald, Sinclair, Sänger and Thorburn, stated that he had not yet seen a case in which he could obtain certain evidence of gonorrhea being the cause of salpingitis, ovaritis, etc. He mentioned cases in which, on the one hand, there existed the symptoms of gonorrheal infection without any probability of gonorrhea, and on the other hand, there was actual gonorrheal infection without sterility. His opinion was that in a few or limited number of cases, gonorrhea seemed capable of producing most serious symptoms, but that these cases were comparatively very rare. There was a very brisk discussion.

In the Surgical Section there was a good debate on the surgery of the arterial trunks, introduced by Mr. Timothy Holmes, who advocated the use of kangaroo-tendon ligatures; he refrained from expressing a definite judgment as to the advisability of so tying the ligatures as to cut through the internal coats. Safety was to be sought in obtaining rapid union of the wound, secondary hemorrhage being a very rare occurrence if the operation were carefully conducted. In those rare cases in which it did occur, it came on slowly, probably proceeded from the distal part of the artery, and was best treated by careful pressure and bandaging. If rapid and violent hemorrhage occurred, either renewed ligature or amputation was the appropriate treatment.

A good discussion took place in this Section, also, on the operative treatment of acute intestinal obstruction due to internal strangulation. Dr. Greig Smith, of Bristol, who opened the debate, urged that operative procedures should be varied according to the condition of the patient and the state of the gastro-intestinal tract. Complete operation was not always compatible with saving of life, when an operation by stages might be. Cases, he thought, might with practical advantage be divided into three classes, viz.: (1) *The Comparatively Favorable.*— Complete operation proper; intestines capable of self-recovery. Incision; seat and length of. Inspection of bowel; finding and relieving strangulation. Examination of seat of obstruction; measures to be adopted according to condition found. Downward passage of intestinal contents. (2) *The Unfavorable.*—Complete operation proper if not prolonged; intestinal evacuation or drainage essential. Propriety of anesthesia if stomach distended; question of artificial emesis. Intestinal percussion and auscultation as guiding to seat of obstruction, and perhaps modifying site of incision. Danger of extensive exploration if obstructing cause not readily found. Necessity of relieving excessive intestinal distension. Modes of intestinal evacuation and drainage. Anesthesia may be stopped when parietal incision made. Special measures. (3) *The Almost Hopeless.*—Complete operation improper; general anesthesia forbidden; intestinal drainage by rapid and simple operation gives chance of life. Local anesthesia; momentary exploration with forefinger; performance of enterostomy. Subsequent treatment and final cure.

The Section of Dermatology, which was organized this year, was very well attended, and excellent discussions took place on alopecia areata, on eczema, and on vaccination rashes, the last a subject which is attracting much general attention at the present time.

The Pathological Section was extremely well organized, thanks to the untiring efforts of the Secretaries, Dr. Delepine, of London, and Dr. Crookes, of Birmingham. A great number of most interesting demonstrations were given. Among many others worthy of note, I can only specify the demonstration on the comparative pathology of tuberculosis, given by Professor McFadyean, of the Edinburgh Veterinary College; by Dr. Sims Woodhead, on tuberculosis; by Dr. Ruffer, on phagocytes; and by Mr. Watson Cheyne, on bone disease. The specimens, or microphotographs, were, in nearly all cases, thrown on the screen by the oxyhydrogen light.

The annual dinner was a very successful function. Professor Osler, of Philadelphia, proposed the toast of the Association, and Surgeon Parke, who had just before received the gold medal of the Association in recognition of his services in Stanley's expedition, responded for the guests. Professor Nicolaysen, of Christiania, also responded for this toast. Professor Osler, in his speech, which was much applauded, protested very strongly against the suggestion made by the President, as mentioned above, to exclude Latin from the medical curriculum. The congress has had the advantage of the presence of a considerable number of American physicians. Private hospitality has been most lavishly extended; and on Wednesday, the Association was received in the Council House by the Mayor of Birmingham, who had converted the quadrangle of that building into a "German *Bier-garten*" for the occasion, the guests being regaled with German beer, served at rough, wooden tables.

GERMANY.

[FROM OUR OWN CORRESPONDENT.]

The International Medical College.—Pfarrer Kneipp and Cold Water Treatment.—Some German Baths.—New Antiseptics.—Treatment of Gonorrhea in the Female.—Dr. Prochownick's Method of Avoiding Craniotomy.

The pending International Medical Congress, to be held at Berlin next week, is naturally the chief subject of conversation, and, no doubt, justly so. In all probability it will be a great success in every respect. Even the French are expected to attend in spite of Professor Huchard's acrimonious protest. In Germany this Chauvinistic demonstration in a purely scientific affair, is regarded as exceedingly out of place, and indeed most unjustifiable. No Frenchman, any more than any other foreigner, would be exposed to any unpleasantness at the hands of the people, much less from his scientific *confrères*. The disparaging remark made by Dr. Stark, and quoted by Virchow, twenty years ago, in a manner which deprived the quotation of almost all its bitterness whatever, should surely not be dug up solely for the purpose of sowing discord among those who are called upon to be the benefactors and enlighteners of mankind. The meeting of the Society of French Dermatologists a few months ago, was not wholly unattended by German specialists, so we will hope that on this far more momentous occasion, Berlin will after all be favored with the presence of a few colleagues from France. Speaking plainly, however, even if they do not come, we shall not be so much the losers as they themselves, for so many visitors have already sent in notice of their intention to attend, and so much interesting material for discussion is provided, that the absence of a few participators will hardly be felt. Before this letter reaches THE MEDICAL TIMES, the Congress will be already over, so I will abstain from discussing further these things of the future, as they will be for your readers things of the past. I should, however, like to emphasize one advantage always to be derived from such meetings, namely, the demonstration of our being united in one common cause, the advance of science and the search after true knowledge for the welfare of suffering humanity. In daily practice one is all too apt to lose sight of these higher aims in the struggle one has to enter into with ignorance and even wilful deception. These meetings are sure test stones for the value of systems and theories. Homeopaths, pseudo-specialists, charlatans, have nothing to compare with such conventions, for their working will not bear the bright light of unbiased investigation. The consciousness of being also a part of this body of honest and truthful workers, must strengthen us in the not always successful contention with those who vend to a benighted public an adulterated and distorted science.

Such reflections will probably at no time be without foundation, but just now they press themselves upon me in consequence of the craze at present rampant with us for Parson Kneipp and his cold water treatment. Wehave no lack of "hydropathics" in Germany, several of them being really very carefully and most successfully conducted institutions, but Pfarrer Kneipp has become "the rage," and so none but Pfarrer Kneipp can serve their turn. To our shame be it said, even a number of regularly certified physicians do not shrink from joining in this kind of business, and advertise in the daily papers as treating by Kneipp's method. And who is Pfarrer Kneipp, and what is he to us? According to some he is the originator of a new and infallible method of curing every defect in the human system, a born genius and the founder of a new era in the history of medicine, a universal benefactor to mankind, and a living refutation to the fallacies of so-called orthodox medicine. Others give their opinions more concisely and call him simply a self-deceiving cheat. It appears that Kneipp, a village priest in the south of Germany, (in Wörishofen), has employed his leisure hours in making himself roughly acquainted with the outlines of medical science, and has become an enthusiastic admirer of hydropathic treatment; which he has enriched with a number of his own original and more or less irrational modifications. These latter consist chiefly in walking barefoot through snow in winter, or in the absence of this, through damp grass or over wet boards. Baths of all kinds, especially shower baths, are of course largely employed, but with as little real system as possible, the only principle brought into requisition being, the colder the better. After bathing, the patient is not permitted to use a towel, but has to put on his clothes wet as he is and get dry by exercise. These details would hardly be worth relating if it were not in order to show what preposterous measures a man employing a so-called natural method (*Naturheilmethode*) may impose upon a confiding public, that would burst out into derision if a regular practitioner were to propose the same. Kneipp, however, is enthusiastically lauded by his adherents, and enormous numbers flock to see him. As no fee is demanded, though regularly taken when offered, which is almost always the case, nobody can complain if the treatment proves a failure. Occasionally the result is simply fatal, as must needs be the case if the doctor employs such heroic measures without forming a precise diagnosis. For instance, a gentleman suffering with kidney disease of a chronic form, was induced by his relations to pay a visit to Wörishofen, but on being subjected to the usual regime there, he naturally became so alarmingly ill, that he had to take to his bed and died very shortly afterwards. As the relations had been themselves the cause of his undertaking this irrational method of treatment, no one was found to institute legal proceedings against the author of the untimely result, or else a period of confinement in prison might have interrupted Kneipp's business for a while.

In general this is an unprofitable year for bathing places, chiefly in consequence of the continual rain we are having. Here, as in other things, the fashion is a very powerful factor. Kissingen may be congratulated on having the honor of still seeing Prince Bismarck as a health seeker at its springs, but it is only fair to say that the place has other attractions besides this. It is a pleasantly situated little place in a picturesque valley, almost in the heart of Germany, and possesses very powerful salt and chalybeate wells. Ems naturally deplores the decease of the Emperor William I; the health of our present Emperor happily being so exceedingly excellent that a spa is unnecessary. Our great thinker, Moltke, favors Cudowa, a somewhat remote place in Silesia, and hitherto not so largely frequented, but which seems always to restore him wonderfully.

Of recently discovered remedies, Professor Stilling's new antiseptic "Pyoktanin" does not seem to find much favor with the profession in general. The experiments performed with it in Berlin, Leipsig and elsewhere are not quite in accordance with the description of the inventor, and have not hitherto yielded a justification of its name, the destroyer of pus. Besides, its intense coloring powers (it is a derivative of the aniline group) constitute a considerable disadvantage, although it is to be used highly diluted. Stilling himself employed it originally in ophthalmic surgery, and his report on the subject was most enthusiastic. Having regard to the valuable work already performed by this observer, other experimenters will doubtless not have been particularly ardent in publishing their unsatisfactory results, and we may safely assume that the failures already recorded are not the only ones observed. As to Lysol, which is now being extensively manufactured at Hamburg, and which is also intended to be an ideal antiseptic, too little is hitherto known about it to permit of a decided opinion. A few chemical experts have passed favorable judgment upon its composition, but crucial tests are still wanting. Rotterin, a compound of chloride of zinc, boracic acid, thymol and a few other of the known antiseptics, excluding corrosive sublimate and carbolic acid, has not become at all universally accepted, and I am very much afraid the compounder, an army doctor of the name of Rotter, will not thus achieve the immortality he aimed at in christening the substance with his own name.

A new method of treating acute gonorrhea in the female by means of the caustic action of the galvanic current is recommended by Dr. Prochownick, a very active and successful gynecologist of Hamburg. Apostoli and others have called attention to the powerful bactericide action of the anode when applied to mucous membranes, and Prochownick has found herein a useful remedy both for chronic endometritis, and for acute gonorrhea of the genital tract, especially of the cervix uteri. His results in the treatment of the former affection still require observation, but of the latter disease 4 cases were so successfully treated at his private clinic and with such lasting effects, that he warmly recommends the method. The positive pole in the shape of a copper sound of suitable size, is cautiously inserted into the cervix and a current of between 80 and 120 M. A. is turned on. Each sitting is to last not longer than 10 minutes. In 6 to 10 sittings complete recovery was achieved in all cases. It is to be regretted that the same treatment is not also applicable to gonorrheal inflammation of the urethra, but the mucous membrane here is unable to stand more than 30 to 40 M. A., which is entirely insufficient. Local treatment here should consist in cauterizing by means of nitrate of silver, preceded by the injection of a pretty concentrated solution of cocaine.

Another observation by the same author promises to prove equally valuable. It concerns the delivery of living children in the case of mothers with pelves so narrowed that otherwise cephalotripsy or Cæsarian section would be inevitable. In 3 such cases, by the advice of Dr. Prochownick, a kind of Banting cure was begun 5 to 7 weeks before term, in order to lessen the dimensions of the fetus at birth. The dietary permitted consisted of meat, eggs, bread, fish, salad, green vegetables, butter, cheese. Soups, potatoes, puddings, beer, sugar and water were strictly prohibited. The result was that in these 3 cases, small but healthy living children were born without risk to the mother, whereas former pregnancies had terminated fatally to the children. Even if other cases should not have so favorable a result, this attempt to obviate the necessity of performing what must always be one of the most painful tasks to the obstetrician, the deliberate destruction of infant life, will certainly be warmly welcomed by the profession.

July 31st, 1890.

REVIEWS AND NOTICES.

INSANITY AT THE PUERPERAL CLIMACTERIC AND LACTATION PERIODS, by William Bevan Lewis, L. R. C. P.; TREATMENT OF DISEASES OF WOMEN BY MASSAGE, by S. Robert Ziegenspeck; THE TREATMENT OF INTERNAL DERANGEMENTS OF THE KNEE JOINT BY OPERATION, by Herbert Wm. Allingham, F. R. C. S.; THE IDIOPATHIC ENLARGEMENT OF THE HEART, by Dr. Oscar Fraentzel; vol. vi., No. 2, Wood's Medical and Surgical Monographs. New York: Wm. Wood & Co. Price, $1.00.

The number for May contains four monographs. The first treats of Insanity at the Puerperal, Climacteric, and Lactational Periods. The author, Wm. Bevan Lewis, L. R. C. P., presents, at the outset, a vivid picture of puerperal insanity; and later demonstrates that the prognosis depends in a striking degree on the treatment adopted—recovery occurring much more promptly and frequently in those consigned to asylums within the first week than in those consigned at a later period. This does not indicate, perhaps, that asylum treatment is necessarily best, but possibly that the average practician is not sufficiently alive to the importance of early and judicious treatment, and that suitable nurses and conveniences are not always to be had in private practice. In the succeeding chapter he treats of the etiology of the Insanity of the Lactational Period, in a clear and forcible manner—exhaustion from various causes, severe and protracted labor, hemorrhage, fever, prolonged lactation, especially when already debilitated by other causes, being the most frequent and important etiological factor. The concluding chapter is devoted to the Insanity of the Climacteric. The second monograph, by Dr. Ziegenspeck, deals with the Treatment of the Diseases of Women by Massage. The author's testimony in favor of the method is positive and should stimulate investigation of its merits. The succeding monographs, Internal Derangements of the Knee Joint and Idiopathic Enlargements of the Heart, are important and fully maintain the high standard of their predecessors.

TREATMENT OF CANCER BY ELECTRICITY. By Dr. J. Inglis Parsons. THE DREADFUL REVIVAL OF LEPROSY. By Sir Morell Mackenzie. DISEASES OF OLD AGE. By D. A. Seidel. URINARY NEUROSES OF CHILDHOOD. By Dr. Louis J. Güinon. VARICOSE VEINS OF THE LOWER EXTREMITIES. By William Bennett, F. R. C. S. USES OF ELECTROLYSIS IN SURGERY. By W. E. Steavenson, M. D. Vol. v, No. 3, Wood's Medical and Surgical Monographs. New York: Wm. Wood & Co. Price, $1.

Dr. Parson's monograph is exceedingly interesting; and, although the use of the interrupted galvanic current in the treatment of cancer is by some rejected as empirical and unscientific, his reported results certainly entitle him to a further hearing and, in selected cases, the coöperation of his confreres. The tone of Sir Morell Mackenzie's article is gauged by the title, and enlightened men everywhere must concur in it—the revival of leprosy *is* dreadful, and the more so to the medical mind because by their indifference, by their criminal ignorance, medical men have contributed so largely to it. And they are still contributing to it. If Sir Morell but strikes them dumb with amazement at their folly he will have made ample amends for his historical error in diagnosis. Diseases of Old Age is equally interesting, if not quite so spicy; and the remaining monographs worthily complete a volume of exceptional interest and value.

A TREATISE ON NEURALGIA. By E. P. Hurd, M. D., member of the Massachusetts Medical Society, etc. Physician's Leisure Library. Detroit: Geo. S. Davis. Cloth, 50 cts.; paper, 25 cts.

Dr. Hurd is well and favorably known to the medical profession for his excellent translations of the works on therapeutics, by Dujardin-Beaumetz. The present booklet briefly reviews our latest knowledge on this subject, supplemented by cases under the personal observation of the author. Among other omissions we note under the treatment of sciatica, that no mention is made of massage, suspension, or flexion of the lower extremity on the abdomen; therapeutic measures which are of undoubted value in this affection. For a compendious knowledge of neuralgia, Dr. Hurd's little book can be highly recommended.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY. By G. A. Liebig, Jr., M. D., Assistant in Electricity, Johns Hopkins University; Lecturer on Medical Electricity, College of Physicians and Surgeons, Baltimore; and George H. Rohé, M. D., Professor of Obstetrics and Hygiene, College of Physicians and Surgeons, Baltimore; Visiting Physician to Bay View and City Hospitals, etc. Philadelphia: F. A. Davis, pp. viii—383. Price, $2.

This volume has been designed "to place in the hands of the student and practitioner, an intelligible account of the science of electricity and a trustworthy guide to its applications in the practice of medicine and surgery." It is divided into three parts, the first treating of electricity and magnetism, from its theoretical or scientific aspect; the second is occupied by electro-physiology, diagnosis and apparatus; while the third is devoted to the general and special therapeutic effects and methods of application. This arrangement is excellent. It places the subject in the best manner for intelligent appreciation, which is greatly aided by the large number of accompanying illustrations. A great deal of space is occupied by the theoretical section on electricity and magnetism, but not more than its importance demands. It is unfortunately true that a regretable ignorance in these matters is very prevalent and equally so that their intelligent comprehension is essential to the successful use of electricity in practice. This portion of the subject is treated in a plain and eminently lucid manner that can readily be understood, only requiring careful perusal. Part II deals very thoroughly with electro-physiology and diagnosis; the section on apparatus is impartially written and the relative merits of different batteries are fairly contrasted. In the concluding section the various diseased conditions in which electricity has been found useful are enumerated. There is a marked absence of misleading dogmatism, while at the same time the subject is quite up to date. As a whole the work can be recommended as a useful and reliable hand-book, simple in its arrangement, and written in a clear and pleasing style.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. Vols. I to V, issue for 1890. Philadelphia: F. A. Davis.

The "Annual" for 1890 is later than usual in its appearance, and the editor explains the 20 days delay by the statement that when the work should have been commenced, over one-half of the staff were prostrated by the influenza epidemic. Notwithstanding this disadvantage, it can certainly be said that the "Annual" has, as a whole, improved. There is a more uniform excellence and a greater smoothness in the various sections than characterized former issues. Several new deparments have been created, or rather differentiated; of these Syphilis, Surgical Mycoses, and Thoracic Surgery, are the most important—the latter, by Prof. J. McFadden Gaston, is profusely illustrated, and of great practical value. Other departments have been extended in scope, and that useful section, General Therapeutics, is fully up to that of previous editions. Of the illustrations it can again be said that they are numerous and good. It is mentioned that the general index, perhaps the most valuable feature of the work, has been condensed; this has not, however, altered its utility, and it really occupies three pages more than in the issue for 1889. The publisher has decided to admit advertisements, candidly stating that the cost of publication has been underestimated, and that to continue the present standard, an increase of income is absolutely necessary. While the firms represented are of the highest standing, we believe that this is hardly in keeping with the character of the work, and we trust that future prosperity will admit of their discontinuance. We learn from independent sources that the subscription department, in the Pacific coast States and Territories, is steadily increasing, a gratifying recognition of a work of undoubted excellence, from western physicians.

THE HUMAN FOOT; ITS FORM AND STRUCTURE, FUNCTIONS AND CLOTHING. By Thomas S. Ellis, M. R. C. S. MODERN CREMATION; ITS HISTORY AND PRACTICE. By Sir H. Thompson, F. R. C. S. APHASIA. A CONTRIBUTION TO THE SUBJECT OF THE DISSOLUTION OF SPEECH FROM CEREBRAL DISEASE. By James Ross, M. D., LL. D. Wood's Medical and Surgical Monographs. Vol. 6, No. 1. New York: Wm. Wood & Co. Price, $1.

This volume contains three monographs by well known authors. The first is entitled, "The Human Foot; its Form and Structure, Functions and Clothing," and is from the pen of Thomas S. Ellis, M. R. C. S. This monograph has awakened considerable interest. Among many other important points, it draws particular attention to the manner in which deformities should be corrected, by use of the muscles which act upon the deformed part; a method which would do away with much operative treatment, and in many cases would yield a much better and more permanent result, although, of necessity, more time and patience would be required. The different functions of the various parts are also fully discussed. The second monograph is a history of "Modern Cremation," by Sir Henry Thompson, who has for many years been an advocate of this practice. The subject is discussed at considerable length, the improvements which have resulted from experience are noted, and the chief objections to the method, such as the concealment, by its agency, of the evidence of crime, are fairly well answered. The third monograph is upon "Aphasia," and comes from the pen of the distinguished neurologist, Dr. James Ross. These papers were given to the profession some time ago in a series of articles that appeared in the *Medical Chronicle*. The whole volume is an exceptionally good one.

Bronchial Asthma, its Causes, Pathology, and Treatment. By John C. Thorowgood, M. D., F. R. C. P. Convulsive Seizures. By J. Hughlings Jackson, M. D., F. R. C. P. Surgical Treatment of Diseases of the Brain. By Ernest von Bergmann. Wood's Medical and Surgical Monographs. New York: Wm. Wood & Co. Price, $1.

Dr. Thorowgood is certainly justified in speaking authoritatively on a subject to which he has, for twenty-one years, given his almost exclusive attention. He first speaks of the history, nature, and mode of production of asthma, and then proceeds to discuss the many conflicting theories which have been propounded, as to the seat and nature of the spasm. Attention is next directed to the varieties of asthma; and later on, the chapter on the treatment of asthma for purposes of prevention, palliation and cure, is excellent reading. The remaining articles, by Jackson and Bergmann, need no comment, as their names have always been prominently identified with all progress connected with their respective subjects.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held Aug. 8, 1890, the following physicians were granted certificates to practise medicine and surgery in this State:

Philip D. Carper, Los Angeles; Med. Dept. Iowa State Univ., March 7,'88.
Frank M. Conn, Santa Rosa; Med. Coll. of Ohio, March 2,'73,
Samuel B. Gordon, Gonzales; Med. Dept. Univ. City of New York, March 12,'89.
Arthur M. Hamilton, San Francisco; National Med. Coll., D. C., March 15,'88.
Henry S. Harvey, San Jose; Med. Dept. Univ. City of New York, March 11,'84.
Samuel M. Hitt, Cayucas; Coll. of Med. Univ. Southern California, April 16,'90.
Martin Krotoszyner, San Francisco (2d certificate); Med. Ex. Board, Berlin, July 25,'87
Halleck Hart Look, Haywards; Coll. of Phys. and Surgs., New York, May 12,'87.
Charles Orendorff, Oakland; Med. Dept. Univ. of Penn., March 13,'62.
Henry Lee Pace, Tulare; Missouri Med. Coll., March 4,'90.
Cyrus Pierce, Burney Velley; Med. Dept. Univ. City of New York, 1846.
George C. Porter, Hollister; Jefferson Med. Coll., Penn., April 2,'90.
Ernest B. Studer, St. Louis, Mo.; St. Louis Med. Coll., Mo., March 13,'90.
George F. Whitney, San Francisco; Med. Dept. Western Res. Univ., O., March 3,'86.
Lucio Zabala (y Hermoso), Los Angeles; Faculty of Med., Paris, France, July 9,'83.

Chas. E. Blake, Secretary.

Official List of Changes in the Medical Corps U. S. Navy (Pacific Station) from July 20th to August 20th, 1890.

Passed Assistant Surgeon, E. H. Marstellar, detached from U. S. S. "Adams," and ordered home.

Passed Assistant Surgeon S. S. White, to Marine Rendezvous, San Francisco, Cal.

Passed Assistant Surgeon A. C. Heffenger, invalided, home from U. S. S. "Ranger."

Passed Assistant Surgeon John S. Sayre, to U. S. S. "Ranger."